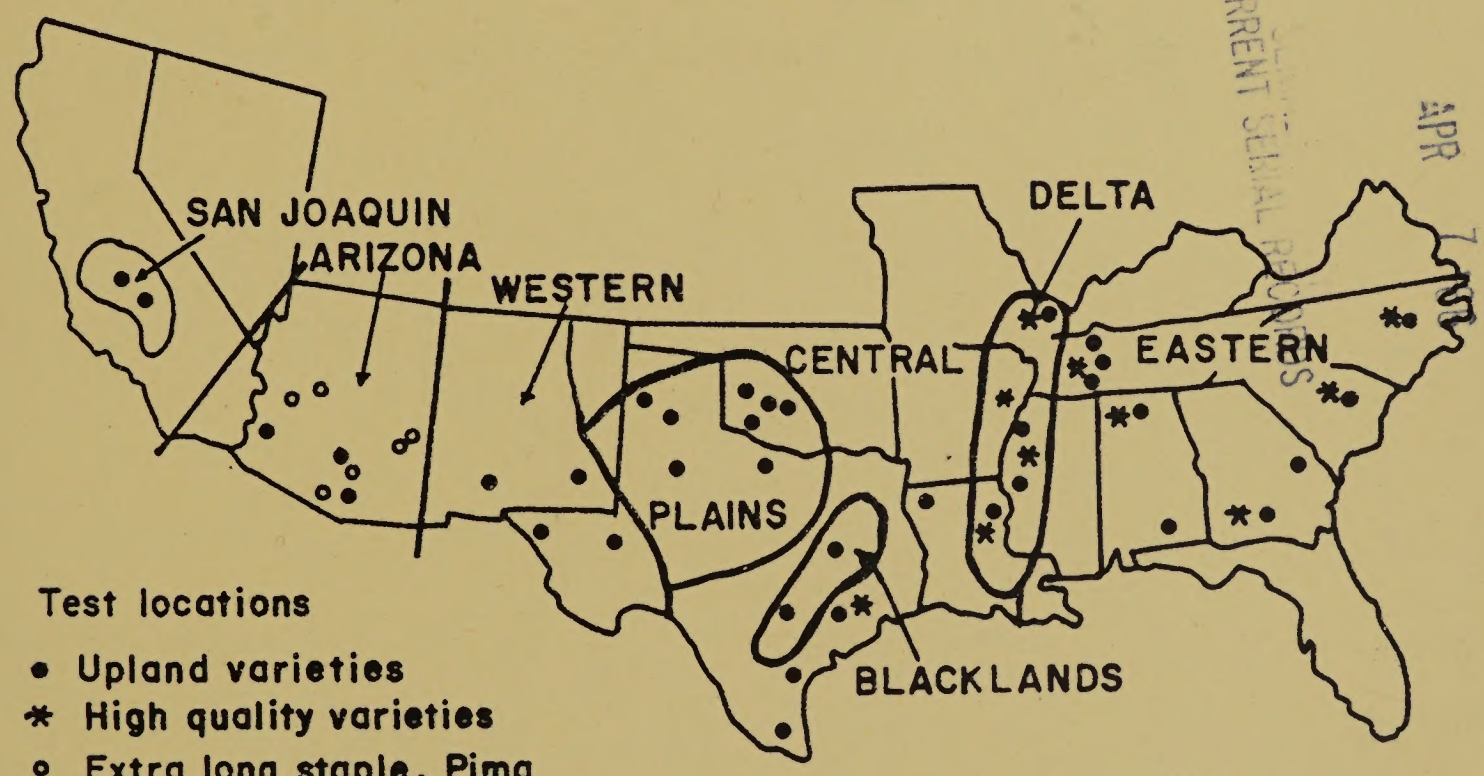
1982
REGIONAL COTTON VARIETY TESTS

Yield, Boll, Seed, Spinning, & Fiber Data



REGIONAL COTTON VARIETY TESTS, 1982

Yield, Boll and Seed Data

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Agricultural Research Service
U. S. Department of Agriculture

The Regional Cotton Variety Test series is available free of charge from the Cotton Quality Research Unit, Southern Regional Research Center, P.O. Box 19687, New Orleans, La. 70179.

Regional Cotton Variety Tests, 1982. Yield, Boll, Seed, Spinning, and Fiber Data. Issued June 1984.

Processed by Southern Regional Research Service Center, U.S. Department of Agriculture, P.O. Box 19687, New Orleans, La. 70179.

CONTENTS

LOCATION INDEX

INTRODUCTION

The National Cotton Variety Testing Program, developed from recommendations of the Joint Cotton Breeding Policy Committee, is a system for uniform reporting of data from cotton-yield trials across the U.S. Cotton Belt. The trials are conducted annually at selected locations involved in the variety-testing programs of the cooperating State agricultural experiment stations. The National Cotton Variety Testing Committee is responsible for coordinating program plans from year to year.

National standard varieties are chosen for a 3-year cycle of testing. For the eighth 3-year cycle of testing, which began in 1981, the national standards were Acala SJ-5, Lockett 77, McNair 235, and Stoneville 213. Within each region, cooperators annually select a group of regional standard varieties that are common to all tests within the region for the particular year. Each station may add entries of local interest, but only data on the national and regional standards are included in this report. All varieties are grown to obtain experimental data, and the designation of national and regional standards is not an endorsement of these varieties by the U.S. Department of Agriculture or the cooperating State agricultural experiment stations.

Plot size, cultural practices, number of entries, and sampling methods are left to the discretion of the participating stations. While these details are not rigidly standardized, all tests are conducted by experienced personnel using sound experimental designs and procedures.

Yield, boll size, lint percentage, and seed index were supplied by the cooperating stations. Fiber and yarn tests were made at USDA's Cotton Laboratory at Clemson, S.C. Seed grades were scored at USDA's Cotton Quality Research Unit, New Orleans, and chemcial analyses of seed were done by a private laboratory. Yield, boll size, and seed index were not received from certain locations. Fiber and seed samples were not collected from several locations. All data were assembled in the Cotton Quality Research Unit. The data were analyzed at the Louisiana State University computer center.

In 1982 the National Cotton Variety Testing Program was organized as shown on the cover map. Upland varieties were grown in all eight regions. Strains developed in the Southern States with superior fiber properties and spinning performance were tested in three contiguous regions (high-quality test). Extra-long-staple American Pima varieties were tested in the Western and Arizona Regions.

REGIONAL TESTS AND PARTICIPATING STATIONS

Eastern Regional Cotton Variety Test (Upland Varieties)

Alabama Agricultural Experiment Station	Auburn, Ala.
Tennessee Valley Substation	Belle Mina, Ala.
Georgia Agricultural Experiment Station	Midville, Ga.
Georgia Coastal Plain Experiment Station	Tifton, Ga.
Pee Dee Experiment Station	Florence, S.C.
Upper Coastal Plain Experiment Station	Rocky Mount, N.C.
West Tennessee Agricultural Experiment Station	Jackson, Tenn.
Ames Plantation	Grand Junction, Tenn.

Delta Regional Cotton Variety Test (Upland Varieties)

Mississippi Agricultural and Forestry Experiment Station:	
Delta Branch	Stoneville, Miss.
Off-station test	Tunica, Miss.
Missouri Agricultural Experiment Station, Delta Center	Portageville, Mo.
Northeast Louisiana Experiment Station	St. Joseph, La.

Central Regional Cotton Variety Test (Upland Varieties)

Red River Valley Experiment Station	Bossier City, La.
Texas A&M University:	
Agricultural Research and Extension Center	Weslaco, Tex.
Agricultural Research Station, off-station test	Nueces County, Tex.
Texas Agricultural Experiment Station	College Station, Tex.

Blacklands Regional Cotton Variety Test (Upland Varieties)

Texas A&M University:	
Agricultural Research and Extension Center	Dallas, Tex.
Stiles Farm Foundation	Thrall, Tex.

Plains Regional Cotton Variety Test (Upland Varieties)

Oklahoma Agricultural Experiment Station:	
Cotton Research Station	
Irrigated test	Chickasha, Okla.
Dryland test	Chickasha, Okla.
Irrigation Experiment Station	Altus, Okla.
Sandy Land Research Station	Mangum, Okla.
Texas A&M University:	
Agricultural Research and Extension Center (Chillicothe):	
Irrigated test	Chillicothe, Tex.
Agricultural Research and Extension Center (Lubbock):	
Irrigated test	Lubbock, Tex.
Off-station test	Halfway, Tex.
	Lamesa, Tex.

Western Regional Cotton Variety Test (Upland Varieties)

New Mexico Agricultural Experiment Station	Las Cruces, N. Mex.
Southeastern Branch Station	Artesia, N. Mex.
Texas A&M University:	
Agricultural Research Center	El Paso, Tex.
Agricultural Research Station	Pecos, Tex.

Arizona Regional Cotton Variety Test (Upland Varieties)

Arizona Agricultural Experiment Station:	
Cotton Research Center	Phoenix, Ariz.
Marana Experiment Farm	Marana, Ariz.
Yuma Valley Station	Yuma, Ariz.

San Joaquin Valley Continuous Cotton Variety Test (Upland Varieties)

California Agricultural Experiment Station:	
West Side Field Station	Five Points, Calif.
U.S. Cotton Field Station	Shafter, Calif.

High-Quality Regional Cotton Variety Test

Alabama Agricultural Experiment Station, Tennessee Valley Substation	Belle Mina, Ala.
Arkansas Agricultural Experiment Station, Southeast Branch	Rohwer, Ark.
Georgia Coastal Plain Experiment Station	Tifton, Ga.
Mississippi Agricultural and Forestry Experiment Station, Delta Branch	Stoneville, Miss.
Missouri Agricultural Experiment Station, Delta Center	Portageville, Mo.
Northeast Louisiana Experiment Station	St. Joseph, La.
Pee Dee Experiment Station	Florence, S.C.
Texas Agricultural Experiment Station	College Station, Tex.
Upper Coastal Plain Experiment Station	Rocky Mount, N.C.
West Tennessee Agricultural Experiment Station	Jackson, Tenn.

Pima Regional Cotton Variety Test

Arizona Agricultural Experiment Station:	
Cotton Research Center	Phoenix, Ariz.
Off-station tests:	Salome, Ariz.
	Wenden, Ariz.
Marana Experimental Farm	
Off-station tests, Clark farm	Marana, Ariz.
Safford Branch Station, off-station tests:	
Curtis farm	Safford, Ariz.
Layton farm	Safford, Ariz.

Combed-Yarn Test (American Pima Varieties)

American Pima cottons are commonly spun into combed yarns. In addition to the carded yarn tenacity, combed-yarn tests of Pima cotton grown at three locations conducting the Pima Regional Cotton Variety Test were made by the Agricultural Marketing Service, U.S. Department of Agriculture, at its Clemson, S.C., laboratory. Classer's grade and staple, yarn tenacity of 11.8- and 7.4-tex (50's and 80's cotton count) yarns, appearance index, imperfections per 1,000 yards, and waste percentages are reported.

TEST RESULTS

No interpretation of the test results other than the indication of the significant differences among means based on an analysis of variance is presented. Means followed by the same letter or letters cannot be considered significantly different at the 0.05 level of probability, as determined by Duncan's multiple-range test. A randomized-block design was used for all analyses, although some tests were planted in lattice designs.

The yield reported for each variety is the average derived from the number of replications used. From three to eight replications were planted, depending on the station, and six replications were more commonly used. Boll size, lint percentage, and seed, fiber, and yarn data are based on two replications of each variety at all locations.

The tables for each regional test are arranged as follows: In the first four tables, average data for the entire region are given by cotton variety and location; the entries in these tables are arranged in order of decreasing lint yield. (For some tests, subregional summaries are also included.) Following these tables average data for each location in the region are given, each table being arranged by variety in decreasing order of lint yield.

The column headings and symbols are defined as follows:

Boll size. The mass, in grams, per boll of seed cotton.

Classer's designation. A description of the quality of cotton in terms of grade and staple according to the official cotton standards of the United States. For grade, classification is based on appearance and is accomplished chiefly through the sense of sight by integration of the three factors of grade--color, leaf, and preparation--in the sample. Classification for staple length involves both sight and touch and is made by pulling out and comparing a typical portion of fiber from a sample with the official staple types.

Colorimeter. These measurements were determined by the Motion Control Cotton Colorimeter. Hunter's *b* value is a measure of increasing yellowness of the cotton. R_d is the percentage of the reflectance; the higher the value, the lighter the cotton.

Digital Fibrograph. An instrument for measuring fiber length. S.L. (span length) is the distance spanned by a specified percentage of the fibers in the test specimen, where the initial starting point of the scanning in the test is considered 100 percent. The 2.5-percent S.L. is the length, in inches, on the test specimen spanned by 2.5 percent of the fibers scanned at the initial starting point. The 2.5-percent S.L. approximates classer's staple. The 50-percent S.L. is the length, in inches, on the test specimen spanned by 50 percent of the fibers scanned at the initial starting point.

Free gossypol. The gossypol in fuzzy seeds as determined by AOCS Method Ba 7-58; expressed as a percentage of the mass of the kernel.

High Volume Instrument. An instrument system used to measure length and strength of cotton fibers. The UHM (upper-half mean) is the average length, in inches, of the half of the fibers, by weight, that contains the longer fibers.

Uniformity is the ratio of the mean length to UHM, expressed as a percentage. Tenacity is the fiber strength of a bundle of fibers measured with the two jaws holding the fiber bundle separated by one-eighth inch, expressed in grams force per tex.

Lint percent. The mass of lint ginned from a sample of seed cotton, expressed as a percentage of the mass of seed cotton.

Lint yield. The mean production of the plots harvested, expressed in pounds of lint per acre.

Micronaire. The fineness of the sample taken from the ginned lint, measured by the Micronaire and expressed in standard (curvilinear scale) micronaire units.

Nitrogen. The nitrogen in fuzzy seeds as determined by AOCS Method Ba 4-38; expressed as a percentage of the mass of the fuzzy seeds. The percentage of nitrogen multiplied by 6.25 is an approximation of the percentage of protein.

Oil. The oil in fuzzy seeds as determined by AOCS Method Aa 4-38; expressed as a percentage of the mass of the fuzzy seeds.

Seed grade. A visual estimate of the amount of linters on seeds. Seeds are graded from 1 to 16; 1=most dense coating, and 16=no linters (completely naked).

Seed index. The mass of 100 fuzzy seeds, in grams.

Stelometer. An instrument for measuring fiber strength. T_1 is the fiber strength of a bundle of fibers measured on the Stelometer with two jaws holding the fiber bundle separated by a 1/8-inch spacer, expressed in millinewtons (mN) per tex. E_1 is the percentage elongation at break of the center one-eighth inch of the fiber bundle measured for T_1 strength on the Stelometer.

Tex. The linear density of fibers, filaments, and yarns, expressed as the mass, in milligrams, of 1 metre of fiber or yarn.

Waste. The difference in mass, expressed as a percentage, of the fed stock and delivered stock. Picker and card waste is the loss in mass during opening, picking, and carding. Comber waste is the loss in mass during combing.

Yarn appearance index. The relative even-ness, smoothness, and freedom from foreign material of the yarn as evaluated by a visual comparison of the yarn with the standards adopted by the American Society for Testing and Materials. Higher numbers indicate more even and smooth yarns with less foreign material.

Yarn imperfections. The abrupt changes in thickness of a yarn detected by two capacitor plates, expressed as the number of such changes per 1,000 yards of yarn; may be called neps.

Yarn tenacity. The strength of the yarn, in millinewtons per tex (mN/tex).

Table 1. Eastern test: Yield, boll, fiber, and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	1298 a	5.93 bcd	40.3 cd	11.1 defg	145 b
McNair 220	1268 a	5.98 bcd	39.6 de	10.9 fgh	142 b
GaT 72-56	1226 ab	6.29 ab	39.9 cde	11.4 cde	139 b
Stoneville 213	1216 ab	5.83 cde	39.2 e	10.8 ghi	129 c
Stoneville 506	1208 ab	5.47 e	39.3 e	11.3 cdef	136 bc
Stoneville 825	1193 ab	5.95 bcd	39.7 de	11.4 bcd	138 b
PD 4548	1188 ab	5.69 de	41.2 b	11.4 cd	156 a
Coker 315	1185 ab	6.06 bcd	41.2 b	10.5 i	145 b
Coker 304	1180 ab	6.23 abc	39.8 de	11.0 efgh	144 b
Deltapine 41	1177 ab	5.84 cde	42.8 a	9.9 j	145 b
Deltapine 62	1132 b	6.53 a	38.1 f	11.7 bc	144 b
Deltapine 55	1118 b	5.79 de	40.8 bc	10.6 hi	140 b
Lockett 77	988 c	6.58 a	38.1 f	11.9 ab	140 b
Acala SJ-5	505 d	6.35 ab	37.8 f	12.1 a	159 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.15 abcd	0.56 abc	197 bc	6.1 b	4.48 c
McNair 220	1.12 de	.53 de	195 bc	5.8 b	4.58 bc
GaT 72-56	1.14 cd	.54 de	194 bc	8.1 a	4.73 abc
Stoneville 213	1.13 cd	.54 cde	186 c	7.1 ab	4.80 ab
Stoneville 506	1.15 abcd	.55 bcde	189 c	7.0 ab	4.57 bc
Stoneville 825	1.14 bcd	.56 abcd	185 c	5.9 b	4.98 a
PD 4548	1.18 ab	.57 ab	208 ab	6.0 b	4.58 bc
Coker 315	1.18 a	.56 abc	196 bc	5.9 b	4.47 c
Coker 304	1.16 abcd	.55 abcde	196 bc	5.8 b	4.63 bc
Deltapine 41	1.15 abcd	.56 abcd	197 bc	6.6 ab	4.47 c
Deltapine 62	1.18 a	.57 abc	200 abc	6.7 ab	4.58 bc
Deltapine 55	1.15 abcd	.54 de	191 bc	6.6 ab	4.45 c
Lockett 77	1.10 e	.53 e	183 c	5.9 b	4.03 d
Acala SJ-5	1.16 abc	.58 a	216 a	5.8 b	4.17 d

Table 2. Eastern test: High-Volume Instrument, Colorimeter, and seed data by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 235	1.18 bc	83.7 ab	25.8 bc	76.9 a	8.2 abc
McNair 220	1.15 cd	83.0 ab	27.5 ab	74.9 a	8.3 abc
GaT 72-56	1.18 bcd	83.3 ab	27.7 ab	74.8 a	8.4 ab
Stoneville 213	1.17 cd	83.2 ab	25.2 c	77.0 a	8.7 a
Stoneville 506	1.18 bc	82.8 b	26.5 b	75.1 a	8.4 ab
Stoneville 825	1.18 bcd	83.8 ab	25.2 c	75.7 a	8.2 abc
PD 4548	1.23 ab	83.7 ab	28.8 a	75.8 a	8.3 abc
Coker 315	1.23 ab	83.3 ab	25.8 bc	75.4 a	8.6 ab
Coker 304	1.21 abc	83.2 ab	27.0 abc	75.7 a	8.6 ab
Deltapine 41	1.18 bc	83.3 ab	26.0 bc	76.2 a	8.4 ab
Deltapine 62	1.24 a	83.7 ab	27.7 ab	77.9 a	7.7 c
Deltapine 55	1.20 abc	82.8 b	26.2 bc	76.1 a	8.3 ab
Lockett 77	1.12 d	82.8 b	25.5 c	76.5 a	8.0 bc
Acala SJ-5	1.19 bc	84.3 a	28.7 a	75.4 a	8.5 ab

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
McNair 235	21.0 b	3.11 bc	1.28 cde	4.9 ab
McNair 220	21.1 b	3.06 bc	1.22 def	4.8 abc
GaT 72-56	20.0 de	3.08 bc	1.20 ef	4.4 bcd
Stoneville 213	19.1 fg	3.05 bc	1.46 a	3.6 e
Stoneville 506	20.4 bcd	3.00 bc	1.22 def	4.8 abc
Stoneville 825	20.2 cd	2.99 c	1.48 a	4.1 cde
PD 4548	21.8 a	3.21 ab	1.27 cde	4.8 abc
Coker 315	20.6 bcd	3.13 bc	1.34 bc	4.4 abcd
Coker 304	NA	NA	NA	NA
Deltapine 41	18.7 g	3.14 abc	1.29 cd	5.0 a
Deltapine 62	20.7 bc	2.96 c	1.33 c	4.0 de
Deltapine 55	19.6 ef	3.16 abc	1.41 ab	4.4 bcd
Lockett 77	21.1 b	3.09 bc	1.18 f	4.2 cd
Acala SJ-5	20.6 bcd	3.33 a	1.05 g	4.2 cd

NA, Data not available.

Table 3. Eastern test: Yield, boll, fiber, and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Tifton, Ga.	1370 a	5.80 cd	40.0 b	11.1 b	NA
Florence, S.C.	1365 a	6.08 bc	39.6 bc	10.5 cd	141 b
Midville, Ga.	1298 a	5.62 d	38.9 c	11.0 bc	NA
Rocky Mount, N.C. .	1169 b	5.84 cd	42.6 a	10.1 d	NA
Jackson, Tenn.	1122 b	6.98 a	36.7 d	12.2 a	152 a
Belle Mina, Ala. ..	1091 b	5.92 cd	40.5 b	11.2 b	137 b
Ames Plantation, Tenn.	926 c	6.40 b	40.1 b	11.9 a	NA
Auburn (Shorter), Ala.	712 d	5.68 d	40.1 b	11.2 b	NA

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Tifton, Ga.	NA	NA	NA	NA	NA
Florence, S.C.	1.13 b	0.52 c	192 a	6.6 a	4.30 b
Midville, Ga.	NA	NA	NA	NA	NA
Rocky Mount, N.C. .	NA	NA	NA	NA	NA
Jackson, Tenn.	1.18 a	.59 a	200 a	5.9 a	4.65 a
Belle Mina, Ala. ..	1.14 b	.55 b	194 a	6.7 a	4.66 a
Ames Plantation, Tenn.	NA	NA	NA	NA	NA
Auburn (Shorter), Ala.	NA	NA	NA	NA	NA

NA, Data not available.

Table 4. Eastern test: High-Volume Instrument, Colorimeter, and seed data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Tifton, Ga.	NA	NA	NA	NA	NA
Florence, S.C.	1.16 b	82.5 c	26.5 ab	77.1 a	8.4 ab
Midville, Ga.	NA	NA	NA	NA	NA
Rocky Mount, N.C. .	NA	NA	NA	NA	NA
Jackson, Tenn.	1.22 a	84.2 a	27.4 a	75.3 a	8.9 a
Belle Mina, Ala. ..	1.19 ab	83.3 b	26.1 b	75.5 a	7.8 b
Ames Plantation, Tenn.	NA	NA	NA	NA	NA
Auburn (Shorter), Ala.	NA	NA	NA	NA	NA

Location	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Tifton, Ga.	NA	NA	NA	NA
Florence, S.C.	20.1 a	2.99 ab	1.40 a	3.6 c
Midville, Ga.	22.1 a	2.77 b	1.37 ab	4.8 ab
Rocky Mount, N.C. .	NA	NA	NA	NA
Jackson, Tenn.	19.8 a	3.30 a	1.21 bc	5.0 a
Belle Mina, Ala. ..	NA	NA	NA	NA
Ames Plantation, Tenn.	NA	NA	NA	NA
Auburn (Shorter), Ala.	19.4 a	3.38 a	1.14 c	4.4 b

NA, Data not available.

Table 5. Eastern test: Yield, boll, and yarn tenacity data for Tifton, Ga.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	1664 a	5.59	40.2	10.8	NA
McNair 235	1610 ab	5.77	42.2	10.6	NA
McNair 220	1590 abc	5.14	40.8	10.8	NA
PD 4548	1469 abcd	5.58	42.1	11.1	NA
Coker 304	1462 abcd	6.10	38.6	10.4	NA
Stoneville 506	1426 abcd	5.25	40.3	11.8	NA
Stoneville 825	1414 abcd	6.15	39.9	11.4	NA
Coker 315	1398 abcd	6.40	40.0	11.0	NA
GaT 72-56	1394 abcd	6.04	39.6	11.3	NA
Deltapine 55	1352 bcd	6.09	40.6	10.8	NA
Deltapine 41	1319 cd	6.11	43.7	10.2	NA
Deltapine 62	1304 d	5.96	38.1	11.8	NA
Lockett 77	1288 d	6.25	37.5	12.0	NA
Acala SJ-5	493 e	4.77	36.6	11.8	NA

NA, Data not available.

Table 6. Eastern test: Yield, boll, fiber, and yarn tenacity data for Florence, S.C.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	1612	5.93	38.9	10.6	143
PD 4548	1555	5.46	43.2	9.8	146
Coker 304	1513	6.40	40.5	10.4	145
Coker 315	1501	5.91	41.4	9.7	144
Deltapine 41	1496	5.91	43.2	9.3	140
GaT 72-56	1488	6.29	40.4	10.8	140
Stoneville 213	1481	5.60	37.5	10.4	126
McNair 220	1480	6.03	38.6	10.3	146
Stoneville 825	1460	5.92	39.7	11.0	142
Deltapine 55	1423	5.99	41.5	9.6	136
Stoneville 506	1318	5.76	38.0	11.6	138
Deltapine 62	1221	6.39	37.0	11.2	144
Lockett 77	1174	6.75	38.1	11.2	136
Acala SJ-5	388	6.81	36.4	11.8	152

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.12	0.52	196	6.0	4.30
PD 4548	1.13	.54	190	5.8	4.45
Coker 304	1.16	.53	200	6.4	4.30
Coker 315	1.16	.54	188	6.1	4.30
Deltapine 41	1.13	.52	194	6.9	4.15
GaT 72-56	1.11	.51	184	11.2	4.45
Stoneville 213	1.10	.50	192	7.3	4.35
McNair 220	1.10	.52	195	5.6	4.25
Stoneville 825	1.14	.54	184	5.6	4.65
Deltapine 55	1.15	.52	196	7.5	4.25
Stoneville 506	1.15	.53	186	6.6	4.65
Deltapine 62	1.17	.54	194	5.8	4.40
Lockett 77	1.07	.50	177	5.8	3.95
Acala SJ-5	1.12	.52	210	5.5	3.75

Table 7. Eastern test: High-Volume Instrument, Colorimeter, and seed data for Florence, S.C.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 235	1.16	82.5	26.5	78.2	8.2
PD 4548	1.14	82.5	27.0	77.8	8.3
Coker 304	1.22	82.0	27.0	76.2	8.6
Coker 315	1.19	82.0	25.5	77.2	9.0
Deltapine 41	1.15	83.0	25.0	76.8	8.5
GaT 72-56	1.14	83.0	27.5	76.2	8.2
Stoneville 213	1.13	82.0	25.0	76.8	8.8
McNair 220	1.15	82.5	28.0	78.0	8.5
Stoneville 825	1.17	84.0	25.5	79.5	8.3
Deltapine 55	1.17	82.0	27.0	78.2	8.0
Stoneville 506	1.18	82.5	27.0	73.2	8.3
Deltapine 62	1.20	82.5	27.5	76.8	8.1
Lockett 77	1.09	82.0	26.0	78.5	8.1
Acala SJ-5	1.16	82.5	27.0	76.0	8.1

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
McNair 235	20.8	3.00	1.32	4.0
PD 4548	21.8	3.03	1.34	3.5
Coker 304	NA	NA	NA	NA
Coker 315	20.4	3.04	1.40	4.0
Deltapine 41	18.5	3.12	1.45	4.0
GaT 72-56	19.4	3.01	1.28	3.5
Stoneville 213	18.8	3.01	1.61	3.0
McNair 220	21.2	2.92	1.28	4.0
Stoneville 825	19.9	2.97	1.64	3.0
Deltapine 55	19.0	3.06	1.52	4.0
Stoneville 506	20.2	2.86	1.38	4.0
Deltapine 62	20.9	2.88	1.45	3.0
Lockett 77	21.2	2.98	1.28	3.5
Acala SJ-5	19.9	2.98	1.18	3.0

NA, Data not available.

Table 8. Eastern test: Yield, boll, and yarn tenacity data for Midville, Ga.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
PD 4548	1552 a	5.41	40.4	11.2	NA
McNair 235	1527 a	5.57	39.0	11.8	NA
GaT 72-56	1465 ab	5.96	39.4	10.4	NA
Deltapine 55	1403 abc	5.43	40.3	10.2	NA
Coker 315	1398 abc	5.67	40.6	10.1	NA
McNair 220	1393 abc	5.85	37.6	11.6	NA
Deltapine 41	1389 abc	5.40	42.8	9.4	NA
Stoneville 825	1352 abc	5.58	38.2	11.4	NA
Stoneville 506	1299 bc	3.52	36.8	11.4	NA
Stoneville 213	1272 bc	5.83	36.9	10.8	NA
Deltapine 62	1252 bc	5.67	37.2	11.2	NA
Coker 304	1207 c	5.91	39.4	10.6	NA
Lockett 77	1199 c	6.51	37.4	11.6	NA
Acala SJ-5	457 d	6.34	38.8	11.8	NA

NA, Data not available.

Table 9. Eastern test: Seed data for Midville, Ga.

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
PD 4548	23.6	2.88	1.48	5.0
McNair 235	23.2	2.76	1.38	5.0
GaT 72-56	22.4	2.56	1.34	4.5
Deltapine 55	21.6	2.80	1.53	5.0
Coker 315	21.8	2.88	1.40	4.5
McNair 220	22.8	2.85	1.30	5.0
Deltapine 41	19.6	2.85	1.28	5.0
Stoneville 825	21.8	2.73	1.56	4.5
Stoneville 506	21.6	2.90	1.26	5.0
Stoneville 213	21.2	2.89	1.58	4.0
Deltapine 62	22.2	2.48	1.46	5.0
Coker 304	NA	NA	NA	NA
Lockett 77	23.2	2.56	1.28	5.0
Acala SJ-5	22.4	2.86	1.06	4.5

NA, Data not available.

Table 10. Eastern test: Yield, boll, and yarn tenacity data for Rocky Mt., N.C.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 220	1368 a	6.01	41.9	9.9	NA
Deltapine 41	1347 ab	5.59	46.0	8.8	NA
McNair 235	1319 ab	5.70	43.0	9.7	NA
GaT 72-56	1303 abc	6.11	42.3	10.4	NA
Stoneville 506	1271 abc	5.51	42.2	10.4	NA
PD 4548	1227 abc	5.47	43.8	10.1	NA
Stoneville 213	1185 bcd	5.43	42.0	9.8	NA
Deltapine 62	1176 bcd	6.08	42.0	10.6	NA
Stoneville 825	1142 cd	5.82	42.8	10.1	NA
Deltapine 55	1136 cd	5.65	43.8	9.4	NA
Coker 304	1134 cd	6.02	42.6	10.2	NA
Coker 315	1133 cd	5.74	44.0	9.6	NA
Lockett 77	1029 d	6.47	40.4	11.0	NA
Acala SJ-5	595 e	6.12	40.3	11.0	NA

NA, Data not available.

Table 11. Eastern test: Yield, boll, fiber, and yarn tenacity data for Jackson, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	1272 a	6.86	37.8	12.1	158
Stoneville 506	1252 a	6.61	36.3	11.8	139
McNair 220	1246 ab	6.89	37.6	12.0	144
Deltapine 62	1231 ab	7.72	34.4	13.0	151
Coker 304	1225 abc	6.98	36.6	12.2	146
Stoneville 213	1199 abc	6.76	35.8	12.2	136
GaT 72-56	1151 abc	7.04	36.5	12.6	148
Coker 315	1142 abc	7.34	38.2	11.8	150
Stoneville 825	1119 abc	6.76	36.4	12.0	146
Deltapine 41	1118 abc	7.11	38.3	10.9	160
Deltapine 55	1092 bc	6.78	36.3	11.8	153
PD 4548	1072 bc	6.35	36.7	12.8	166
Lockett 77	809 d	7.36	37.0	12.4	150
Acala SJ-5	779 d	7.10	36.2	12.8	174

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.20	0.62	203	5.8	4.70
Stoneville 506	1.19	.58	188	6.8	4.65
McNair 220	1.14	.56	190	5.4	4.80
Deltapine 62	1.21	.59	208	6.8	4.55
Coker 304	1.14	.58	192	5.3	4.90
Stoneville 213	1.17	.59	189	6.5	4.95
GaT 72-56	1.17	.57	199	6.0	4.80
Coker 315	1.20	.58	206	5.2	4.55
Stoneville 825	1.18	.59	181	5.7	5.30
Deltapine 41	1.18	.61	214	5.8	4.60
Deltapine 55	1.17	.56	194	5.9	4.60
PD 4548	1.22	.60	209	5.9	4.55
Lockett 77	1.14	.57	192	5.8	3.95
Acala SJ-5	1.18	.62	232	5.7	4.25

Table 12. Eastern test: High-Volume Instrument, Colorimeter, and seed data for Jackson, Tenn.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 235	1.20	84.5	26.5	77.2	9.1
Stoneville 506	1.20	83.0	26.0	74.2	9.3
McNair 220	1.14	83.0	27.0	71.5	8.9
Deltapine 62	1.30	85.0	28.5	78.2	7.8
Coker 304	1.18	84.5	27.5	76.5	8.8
Stoneville 213	1.22	84.0	25.5	76.8	7.0
GaT 72-56	1.22	84.5	29.0	74.8	9.1
Coker 315	1.24	84.0	27.5	75.2	9.1
Stoneville 825	1.20	83.5	25.0	72.5	9.1
Deltapine 41	1.22	84.0	27.5	75.2	9.1
Deltapine 55	1.24	84.5	26.5	77.0	8.8
PD 4548	1.28	84.5	29.5	74.8	9.0
Lockett 77	1.17	83.5	27.0	73.5	8.3
Acala SJ-5	1.24	87.0	30.0	76.5	8.8

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
McNair 235	20.4	3.22	1.28	5.5
Stoneville 506	19.8	3.06	1.18	5.0
McNair 220	20.4	3.26	1.14	5.0
Deltapine 62	20.5	3.14	1.33	4.0
Coker 304	NA	NA	NA	NA
Stoneville 213	18.7	3.18	1.30	4.5
GaT 72-56	19.6	3.30	1.13	5.0
Coker 315	20.4	3.28	1.32	4.5
Stoneville 825	19.2	3.20	1.28	5.0
Deltapine 41	18.2	3.36	1.22	6.0
Deltapine 55	19.0	3.38	1.32	5.0
PD 4548	21.2	3.46	1.14	5.5
Lockett 77	20.0	3.30	1.11	4.5
Acala SJ-5	20.4	3.72	1.02	5.0

NA, Data not available.

Table 13. Eastern test: Yield, boll, fiber, and yarn tenacity data for Belle Mina, Ala.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 315	1257 a	5.40	41.6	10.4	141
Stoneville 825	1219 ab	5.78	41.0	11.3	128
McNair 235	1211 ab	5.67	40.6	10.8	134
Stoneville 506	1207 ab	5.29	40.1	11.0	131
GaT 72-56	1200 ab	6.26	40.6	12.0	130
Coker 304	1175 ab	6.02	40.5	11.1	141
McNair 220	1158 ab	5.92	39.9	11.0	136
Deltapine 41	1142 ab	5.08	43.5	10.0	136
Stoneville 213	1140 ab	5.67	40.2	11.0	126
PD 4548	1127 abc	5.87	41.4	12.1	156
Deltapine 62	1086 abc	7.80	39.4	11.6	136
Deltapine 55	1040 bc	5.17	42.0	10.4	132
Lockett 77	945 c	6.22	37.9	12.2	134
Acala SJ-5	364 d	6.66	38.4	12.8	151

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Coker 315	1.20	0.58	192	6.3	4.55
Stoneville 825	1.12	.55	190	6.4	5.00
McNair 235	1.14	.55	191	6.4	4.45
Stoneville 506	1.12	.54	193	7.8	4.40
GaT 72-56	1.13	.53	200	7.0	4.95
Coker 304	1.16	.56	196	5.8	4.70
McNair 220	1.12	.52	202	6.5	4.70
Deltapine 41	1.13	.55	183	7.2	4.65
Stoneville 213	1.12	.54	175	7.5	5.10
PD 4548	1.19	.57	226	6.4	4.75
Deltapine 62	1.17	.58	199	7.3	4.80
Deltapine 55	1.12	.53	182	6.4	4.50
Lockett 77	1.08	.51	182	6.0	4.20
Acala SJ-5	1.18	.59	205	6.2	4.50

Table 14. Eastern test: High-Volume Instrument and Colorimeter data for Belle Mina, Ala.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Coker 315	1.26	84.0	24.5	73.8	7.8
Stoneville 825	1.16	84.0	25.0	75.0	7.1
McNair 235	1.19	84.0	24.5	75.2	7.4
Stoneville 506	1.16	83.0	26.5	77.8	7.7
GaT 72-56	1.16	82.5	26.5	73.5	8.0
Coker 304	1.22	83.0	26.5	74.2	8.4
McNair 220	1.16	83.5	27.5	75.2	7.5
Deltapine 41	1.18	83.0	25.5	76.5	7.5
Stoneville 213	1.16	83.5	25.0	77.5	8.3
PD 4548	1.27	84.0	30.0	74.8	7.6
Deltapine 62	1.22	83.5	27.0	78.8	7.1
Deltapine 55	1.18	82.0	25.0	73.0	8.2
Lockett 77	1.12	83.0	23.5	77.5	7.6
Acala SJ-5	1.18	83.5	29.0	73.8	8.6

Table 15. Eastern test: Yield, boll, and yarn tenacity data for Ames Plantation, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 506	1056 a	6.52	39.8	11.6	NA
Deltapine 62	1045 a	6.68	39.2	12.2	NA
McNair 220	1026 ab	6.50	39.8	11.3	NA
GaT 72-56	997 abc	6.56	40.4	12.0	NA
Stoneville 213	995 abc	6.09	40.1	11.0	NA
McNair 235	982 abc	6.00	41.0	11.9	NA
Stoneville 825	980 abc	5.90	40.0	13.4	NA
Coker 304	956 abc	6.72	40.0	11.6	NA
Coker 315	931 abc	6.22	42.0	10.7	NA
Lockett 77	914 abc	7.06	38.8	12.2	NA
Deltapine 41	874 bc	6.42	41.8	11.0	NA
Deltapine 55	850 c	6.02	40.5	12.4	NA
PD 4548	848 c	5.90	41.4	12.2	NA
Acala SJ-5	509 d	7.00	37.4	13.0	NA

NA, Data not available.

Table 16. Eastern test: Yield, boll, and yarn tenacity data for Auburn (Shorter), Ala.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 825	893 a	5.67	39.4	11.0	NA
McNair 220	856 ab	5.54	40.2	10.8	NA
McNair 235	851 ab	5.94	39.8	11.1	NA
Stoneville 506	798 abc	5.31	40.7	11.1	NA
Stoneville 213	793 abc	5.67	40.6	10.6	NA
GaT 72-56	791 abc	6.04	40.0	11.6	NA
Coker 315	741 abc	5.78	41.9	10.6	NA
Coker 304	717 bcd	5.70	40.5	11.1	NA
PD 4548	673 cd	5.52	41.0	12.1	NA
Deltapine 62	668 cd	5.96	37.4	11.9	NA
Deltapine 41	664 cd	5.10	43.0	9.6	NA
Deltapine 55	633 cd	5.20	41.2	10.2	NA
Lockett 77	560 d	6.04	37.4	12.3	NA
Acala SJ-5	326 e	5.98	38.4	12.0	NA

NA, Data not available.

Table 17. Eastern test: Seed data for Auburn (Shorter), Ala.

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Stoneville 825	19.5	3.16	1.38	4.0
McNair 220	20.0	3.22	1.18	5.0
McNair 235	19.6	3.44	1.15	5.0
Stoneville 506	20.2	3.21	1.07	5.0
Stoneville 213	18.0	3.13	1.36	3.0
GaT 72-56	18.6	3.45	1.04	4.5
Coker 315	19.5	3.51	1.12	5.0
Coker 304	NA	NA	NA	NA
PD 4548	20.6	3.46	1.13	5.0
Deltapine 62	19.4	3.35	1.07	4.0
Deltapine 41	18.4	3.26	1.20	5.0
Deltapine 55	18.5	3.42	1.27	3.5
Lockett 77	19.8	3.52	1.03	4.0
Acala SJ-5	19.8	3.76	.92	4.5

NA, Data not available.

Table 18. Delta test: Yield, boll, fiber and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	1414 a	5.50 cd	43.2 a	9.6 f	146 bc
Deltapine 55	1357 a	5.67 bcd	41.6 b	10.1 ef	138 d
Stoneville 213	1330 a	5.82 bc	39.3 def	10.9 cd	128 e
Stoneville 506	1324 a	5.58 bcd	38.7 ef	11.1 cd	135 de
McNair 235	1299 a	5.67 bcd	40.0 cd	10.6 de	150 b
Des 56	1292 a	5.39 d	38.9 ef	10.6 de	137 d
Stoneville 825	1256 a	5.71 bcd	39.6 de	11.2 bcd	134 de
Coker 3131	1250 a	5.95 b	40.8 bc	11.4 abc	135 de
Lockett 77	1045 b	6.42 a	37.3 g	11.8 ab	139 cd
Acala SJ-5	700 c	6.49 a	38.3 f	12.0 a	166 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 41	1.14 ab	0.54 ab	198 b	6.3 ab	4.67 bc
Deltapine 55	1.13 abc	.52 bcd	185 cd	6.2 ab	4.73 bc
Stoneville 213	1.11 bc	.54 abcd	186 bcd	6.5 ab	4.93 ab
Stoneville 506	1.13 abc	.52 bcd	188 bcd	6.6 ab	4.62 cd
McNair 235	1.10 c	.51 cd	196 bc	5.5 c	4.67 bc
Des 56	1.13 abc	.55 ab	196 bc	6.0 bc	4.70 bc
Stoneville 825	1.12 abc	.53 bcd	188 bcd	5.6 c	5.03 a
Coker 3131	1.12 abc	.54 abc	183 d	6.7 a	4.57 cd
Lockett 77	1.08 d	.51 d	188 bcd	5.5 c	4.15 e
Acala SJ-5	1.14 a	.56 a	225 a	5.6 c	4.35 de

Table 19. Delta test: High-Volume Instrument, Colorimeter, and seed data by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 41	1.14 c	83.2 b	25.3 bcd	75.8 a	7.4 ab
Deltapine 55	1.17 ab	83.0 b	25.7 bc	75.4 a	7.4 b
Stoneville 213	1.13 c	83.3 b	23.5 d	73.6 a	7.6 ab
Stoneville 506	1.15 bc	82.8 b	26.2 bc	75.5 a	6.8 b
McNair 235	1.15 bc	83.2 b	25.5 bcd	74.2 a	7.0 b
Des 56	1.15 bc	83.5 b	26.5 b	74.9 a	7.4 b
Stoneville 825	1.18 a	83.5 b	25.2 bcd	75.3 a	6.9 b
Coker 3131	1.13 c	83.2 b	24.8 bcd	74.3 a	8.2 a
Lockett 77	1.09 d	83.0 b	24.3 cd	76.3 a	6.9 d
Acala SJ-5	1.16 abc	84.7 a	29.3 a	74.6 a	7.5 ab

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Deltapine 41	18.6 d	3.37 ab	1.32 abc	5.5 ab
Deltapine 55	19.0 d	3.37 ab	1.44 a	5.7 a
Stoneville 213	18.8 d	3.28 b	1.42 ab	4.5 c
Stoneville 506	19.4 bcd	3.26 b	1.20 c	5.8 a
McNair 235	20.8 a	3.30 ab	1.18 c	5.5 ab
Des 56	20.0 abc	3.34 ab	1.41 ab	5.5 ab
Stoneville 825	19.1 cd	3.32 ab	1.40 ab	4.8 bc
Coker 3131	20.6 a	3.45 a	1.28 bc	5.7 a
Lockett 77	20.3 ab	3.36 ab	1.03 d	5.5 ab
Acala SJ-5	20.1 ab	3.45 a	.98 d	5.2 abc

Table 20. Delta test: Yield, boll, fiber, and yarn tenacity data by test locations

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
St. Joseph, La. ...	1287 a	5.01 b	42.5 a	10.0 c	142 a
Stoneville, Miss ..	1266 ab	6.20 a	37.9 c	10.9 b	143 a
Tunica, Miss.	1179 bc	5.89 a	38.6 c	11.4 a	NA
Portageville, Mo. .	1162 c	6.18 a	40.0 b	11.3 a	137 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
St. Joseph, La. ...	1.14 a	0.56 a	193 a	5.4 c	4.56 b
Stoneville, Miss ..	1.12 b	.52 b	189 a	6.0 b	4.36 c
Tunica, Miss.	NA	NA	NA	NA	NA
Portageville, Mo. .	1.09 c	.52 b	198 a	6.7 a	5.00 a

NA, Data not available.

Table 21. Delta test: High-Volume Instrument, Colorimeter, and seed data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
St. Joseph, La. ...	1.14 ab	84.0 a	24.4 b	75.7 a	8.0 a
Stoneville, Miss ..	1.17 a	83.2 ab	25.6 ab	78.3 a	5.8 b
Tunica, Miss.	NA	NA	NA	NA	NA
Portageville, Mo. .	1.12 b	82.8 b	27.0 a	71.0 b	8.2 a

Location	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
St. Joseph, La. ...	20.2 a	2.98 b	1.38 a	5.1 b
Stoneville, Miss ..	18.7 b	3.40 a	1.13 a	4.1 c
Tunica, Miss.	NA	NA	NA	NA
Portageville, Mo. .	20.1 a	3.68 a	1.29 a	6.9 a

NA, Data not available.

Table 22. Delta test: Yield, boll, fiber, and yarn tenacity data for St. Joseph, La.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	1696 a	4.77	47.2	9.4	144
Deltapine 55	1495 b	4.80	45.4	9.2	138
McNair 235	1395 bc	4.32	42.9	9.4	152
Coker 3131	1371 bc	5.10	43.7	10.2	136
Stoneville 825	1359 bc	5.00	42.0	10.3	142
Stoneville 506	1347 bc	4.84	41.2	10.0	135
Des 56	1332 bc	4.92	41.2	9.4	140
Stoneville 213	1220 cd	5.02	41.4	9.7	124
Lockett 77	1079 d	5.75	39.4	11.2	146
Acala SJ-5	571 e	5.60	41.0	11.0	168

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 41	1.14	0.56	198	5.6	4.65
Deltapine 55	1.18	.56	180	5.6	4.80
McNair 235	1.12	.54	204	5.2	4.45
Coker 3131	1.13	.56	182	6.0	4.45
Stoneville 825	1.16	.58	186	5.0	5.00
Stoneville 506	1.16	.54	182	5.6	4.70
Des 56	1.18	.60	196	5.4	4.60
Stoneville 213	1.12	.55	195	5.5	4.85
Lockett 77	1.09	.52	192	5.1	4.00
Acala SJ-5	1.16	.58	218	5.2	4.10

Table 23. Delta test: High-Volume Instrument, Colorimeter, and seed data for St. Joseph, La.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 41	1.13	83.5	23.0	78.5	8.4
Deltapine 55	1.16	83.0	23.0	75.8	7.9
McNair 235	1.14	84.0	26.0	73.5	7.5
Coker 3131	1.15	83.5	24.5	76.5	8.6
Stoneville 825	1.21	84.5	23.5	77.8	7.6
Stoneville 506	1.14	83.5	25.0	75.5	7.9
Des 56	1.14	84.5	24.5	75.5	7.7
Stoneville 213	1.12	84.0	21.5	70.2	8.6
Lockett 77	1.10	84.0	24.0	78.5	7.6
Acala SJ-5	1.14	85.0	28.5	75.2	7.9

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Deltapine 41	18.8	2.98	1.39	5.5
Deltapine 55	20.0	2.98	1.64	5.5
McNair 235	20.6	2.89	1.20	5.5
Coker 3131	21.0	3.00	1.36	5.0
Stoneville 825	19.9	2.96	1.62	5.0
Stoneville 506	20.7	2.84	1.39	6.0
Des 56	20.7	2.94	1.56	5.0
Stoneville 213	19.1	2.88	1.61	4.0
Lockett 77	20.8	3.14	1.04	5.0
Acala SJ-5	20.8	3.20	.98	4.5

Table 24. Delta test: Yield, boll, fiber, and yarn tenacity data for Stoneville, Miss.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	1484 a	5.62	41.8	9.4	145
Stoneville 506	1438 ab	5.99	37.4	11.3	138
Stoneville 213	1420 ab	6.16	37.7	10.5	129
Deltapine 55	1408 ab	5.91	39.4	10.1	140
Des 56	1399 ab	5.63	37.4	10.6	140
Stoneville 825	1302 bc	6.17	37.3	11.4	134
McNair 235	1294 bc	6.20	37.7	10.8	156
Coker 3131	1224 c	6.70	38.1	11.1	136
Lockett 77	1072 d	6.98	35.5	12.4	142
Acala SJ-5	623 e	6.62	37.1	11.8	168

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 41	1.15	0.54	195	6.4	4.35
Stoneville 506	1.12	.53	188	6.5	4.20
Stoneville 213	1.12	.54	180	6.8	4.70
Deltapine 55	1.12	.49	180	6.0	4.35
Des 56	1.12	.52	196	6.4	4.40
Stoneville 825	1.11	.50	182	5.4	5.00
McNair 235	1.12	.50	187	5.2	4.35
Coker 3131	1.12	.54	178	6.3	4.25
Lockett 77	1.10	.52	189	5.6	3.75
Acala SJ-5	1.14	.55	217	5.6	4.30

Table 25. Delta test: High-Volume Instrument, Colorimeter, and seed data for Stoneville, Miss.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 41	1.16	83.5	25.5	77.0	5.6
Stoneville 506	1.18	83.0	26.0	78.5	4.6
Stoneville 213	1.16	83.5	23.5	77.5	5.6
Deltapine 55	1.20	83.0	27.5	77.2	6.0
Des 56	1.17	83.0	27.0	79.2	6.4
Stoneville 825	1.18	83.0	26.0	77.8	5.3
McNair 235	1.18	83.0	24.5	79.8	5.6
Coker 3131	1.14	83.0	23.5	81.5	7.3
Lockett 77	1.12	83.0	24.0	77.8	4.9
Acala SJ-5	1.17	84.5	28.5	77.0	6.4

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Deltapine 41	18.3	3.46	1.24	4.0
Stoneville 506	18.2	3.32	1.00	4.5
Stoneville 213	17.2	3.29	1.24	3.0
Deltapine 55	17.1	3.42	1.23	4.5
Des 56	19.1	3.34	1.24	4.5
Stoneville 825	17.9	3.36	1.17	3.0
McNair 235	20.6	3.32	1.12	4.0
Coker 3131	19.9	3.56	1.19	5.0
Lockett 77	19.4	3.42	.97	4.5
Acala SJ-5	18.8	3.46	.92	4.0

Table 26. Delta test: Yield, boll, and yarn tenacity data for Tunica, Miss.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	1368 a	5.89	38.6	11.7	NA
Deltapine 55	1273 ab	5.67	40.4	10.4	NA
Coker 3131	1270 ab	5.95	39.8	12.8	NA
McNair 235	1264 ab	5.97	38.9	11.2	NA
Stoneville 506	1258 ab	5.71	37.5	11.3	NA
Deltapine 41	1231 ab	5.44	41.5	9.5	NA
Des 56	1227 ab	5.55	38.8	11.2	NA
Stoneville 825	1178 b	5.61	38.6	11.4	NA
Lockett 77	958 c	6.46	35.5	12.1	NA
Acala SJ-5	766 d	6.69	37.0	12.8	NA

NA, Data not available.

Table 27. Delta test: Yield, boll, fiber, and yarn tenacity data for Portageville, Mo.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	1262 a	6.15	42.4	10.0	149
McNair 235	1254 a	6.20	40.6	11.0	142
Deltapine 55	1237 a	6.30	41.2	10.8	135
Stoneville 213	1217 a	6.20	39.6	11.8	130
Stoneville 506	1197 a	5.80	38.8	11.6	132
Stoneville 825	1181 a	6.05	40.3	11.6	126
Des 56	1156 a	5.45	38.4	11.0	132
Lockett 77	1119 a	6.50	38.8	11.4	131
Coker 3131	1100 a	6.05	41.8	11.8	132
Acala SJ-5	897 b	7.05	38.3	12.4	160

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 41	1.11	0.52	202	7.0	5.00
McNair 235	1.08	.50	196	6.1	5.20
Deltapine 55	1.10	.52	196	7.0	5.05
Stoneville 213	1.08	.52	185	7.2	5.25
Stoneville 506	1.10	.51	194	7.5	4.95
Stoneville 825	1.10	.51	197	6.2	5.10
Des 56	1.10	.52	196	6.4	5.10
Lockett 77	1.04	.50	182	5.8	4.70
Coker 3131	1.09	.52	188	7.8	5.00
Acala SJ-5	1.13	.56	240	6.1	4.65

Table 28. Delta test: High-Volume Instrument, Colorimeter, and seed data for Portageville, Mo.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 41	1.13	82.5	27.5	71.8	8.3
McNair 235	1.12	82.5	26.0	69.5	7.9
Deltapine 55	1.15	83.0	26.5	73.2	8.3
Stoneville 213	1.10	82.5	25.5	73.0	8.6
Stoneville 506	1.13	82.0	27.5	72.5	8.0
Stoneville 825	1.14	83.0	26.0	70.5	7.8
Des 56	1.12	83.0	28.0	70.0	8.1
Lockett 77	1.05	82.0	25.0	72.8	8.3
Coker 3131	1.11	83.0	26.5	65.0	8.7
Acala SJ-5	1.16	84.5	31.0	71.5	8.2

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Deltapine 41	18.8	3.65	1.33	7.0
McNair 235	21.0	3.67	1.23	7.0
Deltapine 55	19.8	3.71	1.46	7.0
Stoneville 213	20.0	3.68	1.41	6.5
Stoneville 506	19.4	3.64	1.22	7.0
Stoneville 825	19.4	3.64	1.42	6.5
Des 56	20.1	3.76	1.42	7.0
Lockett 77	20.8	3.52	1.08	7.0
Coker 3131	20.8	3.80	1.28	7.0
Acala SJ-5	20.8	3.70	1.06	7.0

Table 29. Central test: Yield, boll, fiber, and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 220	1168 a	5.43 b	36.5 b	10.1 b	150 b
Deltapine 55	1133 a	5.15 b	39.0 a	9.0 c	142 cd
McNair 235	1104 a	5.16 b	36.7 b	9.9 b	149 bc
Stoneville 213	1101 a	5.17 b	36.5 b	9.8 b	137 d
Stoneville 825	1047 a	5.16 b	36.8 b	10.0 b	143 cd
Deltapine 61	1022 a	5.35 b	37.0 b	9.6 bc	139 d
Lockett 77	975 a	5.87 a	34.7 c	11.2 a	149 bc
Acala SJ-5	687 b	5.89 a	36.0 bc	11.2 a	176 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 220	1.10 ab	0.54 ab	204 b	5.3 cd	4.39 bc
Deltapine 55	1.11 ab	.53 bc	190 c	5.6 c	4.38 bc
McNair 235	1.10 ab	.54 abc	195 bc	5.4 c	4.18 cd
Stoneville 213	1.09 ab	.54 abc	190 c	6.1 b	4.72 ab
Stoneville 825	1.10 ab	.54 abc	184 c	5.0 d	4.80 a
Deltapine 61	1.09 b	.52 bc	194 bc	6.7 a	4.91 a
Lockett 77	1.08 b	.52 c	189 c	5.3 cd	3.84 d
Acala SJ-5	1.12 a	.55 c	230 a	5.0 d	4.41 bc

Table 30. Central test: High-Volume Instrument, Colorimeter, and seed data by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 220	1.11 a	84.1 b	25.2 b	68.8 ab	9.4 ab
Deltapine 55	1.10 a	82.8 c	23.6 c	71.6 ab	9.6 a
McNair 235	1.10 a	83.8 b	25.4 b	67.1 b	9.6 a
Stoneville 213	1.10 a	83.9 b	23.4 c	72.2 a	9.5 a
Stoneville 825	1.12 a	84.0 b	24.0 bc	68.5 ab	8.8 b
Deltapine 61	1.12 a	84.4 ab	23.6 c	70.2 ab	9.4 ab
Lockett 77	1.07 b	83.4 bc	23.2 c	70.4 ab	9.2 ab
Acala SJ-5	1.13 a	85.2 a	28.1 a	69.8 ab	9.4 ab

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
McNair 220	18.4 ab	3.34 b	0.94 b	5.4 ab
Deltapine 55	17.7 abc	3.36 b	1.18 a	5.2 abc
McNair 235	18.2 abc	3.34 b	.94 b	5.4 ab
Stoneville 213	17.0 c	3.29 b	1.20 a	4.4 de
Stoneville 825	17.1 bc	3.37 b	1.11 a	4.8 cde
Deltapine 61	16.9 c	3.23 b	.98 b	5.6 a
Lockett 77	18.5 ab	3.32 b	.84 c	4.9 bcd
Acala SJ-5	18.7 a	3.65 a	.79 c	4.2 e

Table 31. Central test: Yield, boll, fiber, and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Weslaco, Tex.	1334 a	5.75 a	34.4 c	10.7 a	155 a
College Station, Tex.	1164 b	4.88 c	36.0 b	9.2 c	153 a
Bossier City, La. ...	1056 b	5.66 a	40.0 a	10.4 ab	143 b
Nueces County, Tex. .	372 c	5.30 b	36.2 b	10.0 b	140 c

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Weslaco, Tex.	1.12 a	0.55 a	202 a	5.5 b	4.34 a
College Station, Tex.	1.09 b	.54 ab	206 a	5.6 b	4.51 a
Bossier City, La. ...	1.12 a	.53 ab	190 b	5.2 c	4.44 a
Nueces County, Tex. .	1.07 c	.52 b	190 b	5.9 a	4.52 a

Table 32. Central test: High-Volume Instrument, Colorimeter, and seed data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Weslaco, Tex.	1.14 a	84.4 a	25.1 a	69.5 a	9.9 b
College Station, Tex.	1.10 ab	84.1 ab	25.7 a	68.8 a	8.7 c
Bossier City, La. ...	1.12 ab	82.9 b	24.5 ab	69.7 a	8.2 d
Nueces County, Tex. .	1.08 b	84.3 a	23.1 b	71.3 a	10.6 a

Location	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Weslaco, Tex.	18.0 a	3.21 b	0.97 ab	5.2 ab
College Station, Tex.	17.8 a	3.31 b	1.06 a	4.5 c
Bossier City, La. ...	17.0 a	3.75 a	.88 b	5.7 a
Nueces County, Tex. .	18.4 a	3.19 b	1.08 a	4.6 bc

Table 33. Central test: Yield, boll, fiber, and yarn tenacity data for Weslaco, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 220	1715 a	5.66	35.2	10.6	154
Stoneville 825	1571 ab	5.54	34.8	10.9	148
Deltapine 55	1527 ab	5.80	36.2	9.9	156
McNair 235	1372 abc	5.25	35.0	10.0	152
Stoneville 213	1314 abc	5.47	33.3	10.3	146
Deltapine 61	1296 bc	5.80	34.3	10.4	148
Lockett 77	1074 cd	6.16	32.0	11.6	155
Acala SJ-5	805 d	6.28	34.8	11.7	182

	Digital Fibrograph		Stelometer		Micronair reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 220	1.12	0.54	218	5.2	4.30
Stoneville 825	1.12	.56	194	5.0	4.85
Deltapine 55	1.14	.54	194	5.5	4.25
McNair 235	1.12	.56	200	5.6	3.95
Stoneville 213	1.12	.56	196	6.2	4.45
Deltapine 61	1.15	.57	192	6.6	5.05
Lockett 77	1.10	.54	192	5.2	3.45
Acala SJ-5	1.12	.56	228	4.6	4.40

Table 34. Central test: High-Volume Instrument, Colorimeter, and seed data for Weslaco, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 220	1.16	85.0	27.0	70.8	10.5
Stoneville 825	1.15	84.5	24.0	68.0	8.7
Deltapine 55	1.15	84.0	24.0	73.0	9.7
McNair 235	1.12	83.0	27.0	69.0	10.7
Stoneville 213	1.12	84.5	24.0	72.2	9.8
Deltapine 61	1.18	85.5	23.0	63.8	9.5
Lockett 77	1.08	83.5	23.5	70.8	9.6
Acala SJ-5	1.16	85.5	28.0	68.8	10.5

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
McNair 220	19.2	3.10	1.00	6.0
Stoneville 825	17.6	3.24	1.17	5.0
Deltapine 55	19.2	3.22	1.18	5.5
McNair 235	18.4	3.22	.89	5.5
Stoneville 213	17.4	3.17	1.08	4.5
Deltapine 61	14.4	3.04	.96	5.5
Lockett 77	19.1	3.24	.74	5.5
Acala SJ-5	18.9	3.46	.77	4.0

Table 35. Central test: Yield, boll, fiber, and yarn tenacity data for
Station, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index
McNair 220	1407 a	5.04	36.4	9.8
Deltapine 55	1264 b	4.75	38.2	8.0
McNair 235	1257 b	4.56	35.7	8.6
Deltapine 61	1240 b	4.82	37.0	8.4
Stoneville 825	1211 b	4.55	37.2	8.9
Stoneville 213	1150 b	4.53	35.4	8.8
Lockett 77	1021 c	5.06	33.2	10.2
Acala SJ-5	765 d	5.76	35.0	11.4

	Digital Fibrograph		Stelometer	
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)
McNair 220	1.10	0.56	214	5.1
Deltapine 55	1.11	.56	196	5.5
McNair 235	1.07	.53	203	5.4
Deltapine 61	1.08	.52	197	6.4
Stoneville 825	1.10	.54	192	5.3
Stoneville 213	1.07	.54	195	6.2
Lockett 77	1.04	.52	200	5.4
Acala SJ-5	1.13	.56	251	5.3

Table 36. Central test: High-Volume Instrument, Colorimeter, and seed data for College Station, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 220	1.11	84.5	26.5	68.2	8.9
Deltapine 55	1.08	82.5	25.0	69.2	9.2
McNair 235	1.10	84.0	26.5	62.0	8.9
Deltapine 61	1.10	85.0	24.5	72.8	8.8
Stoneville 825	1.12	84.0	25.0	67.2	8.2
Stoneville 213	1.08	83.5	24.0	72.2	8.9
Lockett 77	1.02	83.0	24.0	71.8	8.6
Acala SJ-5	1.16	86.0	30.0	67.0	8.4

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
McNair 220	18.6	3.37	0.93	5.0
Deltapine 55	17.8	3.24	1.27	4.5
McNair 235	17.8	3.30	1.02	5.0
Deltapine 61	17.8	3.12	1.04	5.0
Stoneville 825	17.5	3.24	1.18	4.5
Stoneville 213	16.9	3.20	1.37	4.0
Lockett 77	17.1	3.28	.86	4.0
Acala SJ-5	19.1	3.74	.78	4.0

Table 37. Central test: Yield, boll, fiber, and yarn tenacity data for Bossier City, La.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	1226 a	5.49	41.6	10.3	136
McNair 235	1140 ab	5.78	39.4	10.2	144
Deltapine 55	1131 ab	4.95	43.5	9.0	136
Lockett 77	1077 ab	6.22	38.0	12.2	144
McNair 220	1044 ab	5.88	39.0	10.2	145
Deltapine 61	1030 ab	5.60	39.9	10.2	135
Stoneville 825	995 b	5.39	39.0	10.0	140
Acala SJ-5	801 c	5.97	39.6	11.0	166

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.12	0.54	188	5.2	5.10
McNair 235	1.15	.54	183	5.1	4.10
Deltapine 55	1.12	.52	182	5.4	4.40
Lockett 77	1.12	.54	186	4.8	4.05
McNair 220	1.14	.54	188	5.2	4.00
Deltapine 61	1.08	.50	200	6.4	4.60
Stoneville 825	1.12	.52	166	4.6	4.60
Acala SJ-5	1.13	.56	230	4.7	4.65

Table 38. Central test: High-Volume Instrument, Colorimeter, and seed data for Bossier City, La.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Stoneville 213	1.12	83.0	24.5	72.0	8.4
McNair 235	1.12	83.0	24.5	65.5	8.0
Deltapine 55	1.10	81.0	22.5	71.2	8.8
Lockett 77	1.12	83.5	25.0	73.0	8.1
McNair 220	1.12	83.0	24.5	63.8	7.4
Deltapine 61	1.14	83.0	24.0	71.5	8.7
Stoneville 825	1.12	83.0	24.0	67.0	7.9
Acala SJ-5	1.10	84.0	27.0	73.2	8.2

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Stoneville 213	16.3	3.63	1.05	5.0
McNair 235	17.2	3.76	.86	6.0
Deltapine 55	16.2	3.74	.99	6.0
Lockett 77	18.0	3.64	.81	5.0
McNair 220	17.2	3.83	.81	6.0
Deltapine 61	17.0	3.76	.86	7.0
Stoneville 825	15.9	3.72	.93	5.5
Acala SJ-5	17.8	3.89	.71	5.0

Table 39. Central test: Yield, boll, fiber, and yarn tenacity data for Nueces County, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Lockett 77	512 a	6.04	35.6	10.8	141
McNair 220	448 ab	5.13	35.5	9.6	140
McNair 235	446 ab	5.05	36.8	10.8	146
Deltapine 55	439 abc	5.09	38.0	9.0	135
Stoneville 213	399 bc	5.18	35.9	9.6	128
Deltapine 61	340 cd	5.20	36.8	9.3	130
Stoneville 825	268 d	5.17	36.4	10.0	138
Acala SJ-5	122 e	5.56	34.7	10.6	164

	Digital Fibrograph		Stelometer		Micronair reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Lockett 77	1.06	0.50	176	5.8	3.95
McNair 220	1.06	.52	194	5.6	4.50
McNair 235	1.06	.53	196	5.6	4.30
Deltapine 55	1.08	.50	188	6.0	4.50
Stoneville 213	1.06	.52	183	6.8	4.80
Deltapine 61	1.05	.50	188	7.4	4.85
Stoneville 825	1.07	.52	182	5.2	5.10
Acala SJ-5	1.09	.54	212	5.2	4.20

Table 40. Central test: High-Volume Instrument, Colorimeter, and seed data for Nueces County, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Lockett 77	1.04	83.5	20.5	66.2	10.5
McNair 220	1.06	84.0	23.0	72.5	10.8
McNair 235	1.08	85.0	23.5	71.8	10.7
Deltapine 55	1.08	83.5	23.0	73.0	10.5
Stoneville 213	1.06	84.5	21.0	72.5	10.9
Deltapine 61	1.07	84.0	23.0	72.8	10.6
Stoneville 825	1.10	84.5	23.0	71.8	10.4
Acala SJ-5	1.11	85.5	27.5	70.2	10.5

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Lockett 77	19.8	3.09	0.95	5.0
McNair 220	18.8	3.08	1.02	4.5
McNair 235	19.2	3.09	1.00	5.0
Deltapine 55	17.7	3.24	1.27	5.0
Stoneville 213	17.2	3.17	1.29	4.0
Deltapine 61	18.1	3.02	1.08	5.0
Stoneville 825	17.4	3.28	1.16	4.0
Acala SJ-5	19.0	3.52	.90	4.0

Table 41. Blackland test: Yield, boll, fiber, and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Lockett 77	538 a	5.86 ab	32.3 d	10.4 ab	138 b
Pioneer Brand PR-68	528 ab	5.47 bc	35.7 abc	9.8 abc	140 b
G+P 3774	488 abc	5.05 cd	35.1 bc	9.2 bcde	131 bc
McNair 235	485 abc	4.95 cd	36.2 ab	8.9 cde	133 bc
Tamcot CAMD-3	468 abcd	5.24 cd	34.9 bc	8.9 cde	134 bc
Stoneville 302	428 abcde	4.90 cd	38.0 a	8.2 de	131 bc
Stoneville 213	386 bcde	4.22 e	36.6 ab	8.0 e	131 bc
Tamcot SP37H	357 cde	4.81 d	34.8 bc	8.7 cde	134 bc
Cascot B-2	336 de	5.33 bcd	35.3 bc	9.0 bcde	119 c
Acala SJ-5	324 e	5.26 cd	36.0 abc	9.5 bcd	167 a
Lankart LX571	305 e	6.21 a	33.4 cd	11.0 a	126 bc

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Lockett 77	1.03 abc	0.49 ab	187 b	5.2 a	3.82 e
Pioneer Brand PR-68	1.01 bcd	.49 ab	189 b	5.4 a	4.38 abcd
G+P 3774	1.02 abcd	.49 ab	178 bc	5.9 a	4.05 de
McNair 235	1.02 abcd	.48 b	185 b	5.2 a	4.32 bcd
Tamcot CAMD-3	1.00 bcd	.47 b	181 bc	5.5 a	4.08 cde
Stoneville 302	.98 d	.46 b	185 b	5.3 a	4.05 de
Stoneville 213	1.02 abcd	.49 ab	196 b	5.4 a	4.72 a
Tamcot SP37H	1.04 ab	.49 ab	189 b	5.4 a	4.25 bcd
Cascot B-2	.99 cd	.46 b	163 c	5.2 a	4.48 abc
Acala SJ-5	1.06 a	.53 a	226 a	5.5 a	4.13 bcde
Lankart LX571	1.01 bcd	.50 ab	186 b	5.8 a	4.52 ab

Table 42. Blackland test: High-Volume Instrument, Colorimeter, and seed data by cotton variety

ariety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
ockett 77	1.01 ab	81.2 ab	22.8 bcd	71.4 a	9.0 ab
ioneer Brand PR-68	1.02 ab	82.2 a	22.2 bcd	70.8 a	9.2 a
+P 3774	1.02 ab	81.5 ab	21.8 bcd	68.6 a	9.0 ab
cNair 235	1.01 ab	81.5 ab	23.0 bc	70.8 a	9.0 ab
amcot CAMD-3	1.00 ab	82.0 a	21.8 bcd	70.9 a	9.4 a
toneville 302	.96 b	81.5 ab	22.8 bcd	70.8 a	9.4 a
toneville 213	1.02 ab	82.2 a	23.8 bc	70.4 a	9.2 a
amcot SP37H	1.00 ab	81.2 ab	20.5 d	70.8 a	9.0 ab
ascot B-2	1.00 ab	80.2 b	21.5 cd	70.0 a	9.8 a
cala SJ-5	1.03 a	82.0 a	27.3 a	67.3 a	7.9 b
ankart LX571	1.02 ab	82.2 a	24.0 b	71.1 a	9.6 a

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
ockett 77	17.6 a	3.41 cd	0.77 ab	4.5 de
ioneer Brand PR-68	17.1 ab	3.62 abc	.81 a	5.5 abc
+P 3774	16.1 bcd	3.70 ab	.54 de	4.5 de
cNair 235	16.6 bc	3.58 abcd	.72 abc	5.2 bcd
amcot CAMD-3	17.7 a	3.82 a	.70 abc	6.2 a
toneville 302	16.0 cd	3.50 bcd	.68 bc	5.5 abc
toneville 213	14.3 e	3.31 d	.74 ab	4.0 e
amcot SP37H	17.8 a	3.72 ab	.67 bc	5.8 ab
ascot B-2	15.6 cd	3.51 bcd	.50 e	5.5 abc
cala SJ-5	16.4 bc	3.57 abcd	.62 cd	4.7 cde
ankart LX571	15.4 d	3.31 d	.44 e	5.8 ab

Table 43. Blackland test: Yield, boll, fiber, and yarn tenacity data by test locatio

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Dallas, Tex.	422 a	5.33 a	36.3 a	9.0 a	128 b
Thrall, Tex.	NA	4.09 a	34.1 b	9.4 a	140 a

	Digital Fibrograph		Stelometer		Micronair reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Dallas, Tex.	1.00 a	0.47 b	182 a	5.6 a	4.73 a
Thrall, Tex.	1.02 a	.49 a	191 a	5.3 a	3.81 b

NA, Data not available.

Table 44. Blackland test: High-Volume Instrument, Colorimeter, and seed data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Dallas, Tex.	1.01 a	81.7 a	2.26 a	68.8 a	9.2 a
Thrall, Tex.	1.01 a	81.6 a	2.29 a	71.8 a	9.2 a

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Dallas, Tex.	17.2 a	3.49 b	0.77 a	5.0 a
Thrall, Tex.	15.7 b	3.60 a	.55 b	5.4 a

Table 45. Blackland test: Yield, boll, fiber and yarn tenacity data for Dallas, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Lockett 77	538 a	5.97	33.5	10.1	135
Pioneer Brand PR-68	528 ab	5.57	37.7	10.0	138
G+P 3774	488 abc	4.98	37.0	8.4	122
McNair 235	485 abc	4.81	36.2	9.2	132
Tamcot CAMD-3	468 abcd	5.43	36.5	8.8	125
Stoneville 302	428 abcde	4.88	39.2	8.0	136
Stoneville 213	386 bcde	4.43	38.2	7.2	128
Tamcot SP37H	357 cde	4.98	35.8	8.2	118
Cascot B-2	336 de	5.73	36.9	8.8	106
Acala SJ-5	324 e	5.32	36.6	8.9	156
Lankart LX571	305 e	6.51	33.5	11.6	121

	Digital Fibrograph		Stelometer		Micronair reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Lockett 77	1.02	0.48	184	5.2	4.40
Pioneer Brand PR-68	1.02	.50	191	5.4	4.85
G+P 3774	1.00	.48	164	6.1	4.60
McNair 235	1.01	.47	188	5.6	4.65
Tamcot CAMD-3	1.00	.47	180	5.6	4.55
Stoneville 302	.98	.46	190	5.2	4.35
Stoneville 213	1.00	.48	192	5.8	5.05
Tamcot SP37H	1.04	.47	180	5.8	4.70
Cascot B-2	.95	.42	153	5.3	5.00
Acala SJ-5	1.05	.52	206	5.5	4.60
Lankart LX571	.99	.48	189	5.8	5.20

Table 46. Blackland test: High-Volume Instrument, Colorimeter, and seed data for Dallas, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Lockett 77	1.03	81.5	23.5	70.2	9.2
Pioneer Brand PR-68	1.03	82.0	21.0	68.0	8.7
G+P 3774	1.00	81.0	21.5	63.5	9.1
McNair 235	1.04	82.0	23.0	68.5	8.8
Tamcot CAMD-3	1.02	82.0	22.5	67.8	9.5
Stoneville 302	.98	82.5	22.0	69.8	9.0
Stoneville 213	1.00	82.0	23.5	69.2	9.1
Tamcot SP37H	.98	81.0	20.5	69.0	9.1
Cascot B-2	.98	80.0	21.5	70.5	9.8
Acala SJ-5	1.01	82.0	29.0	71.5	9.0
Lankart LX571	1.02	82.5	24.0	70.2	9.8

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Lockett 77	18.8	3.32	0.94	4.5
Pioneer Brand PR-68	18.2	3.50	.88	5.0
G+P 3774	17.2	3.72	.68	4.5
McNair 235	17.4	3.49	.80	5.0
Tamcot CAMD-3	18.6	3.64	.84	6.0
Stoneville 302	16.6	3.50	.80	5.0
Stoneville 213	15.0	3.36	.84	4.0
Tamcot SP37H	18.3	3.58	.84	5.5
Cascot B-2	15.8	3.38	.57	5.5
Acala SJ-5	17.5	3.62	.74	4.0
Lankart LX571	16.2	3.33	.54	6.0

Table 47. Blackland test: Yield, boll, fiber and yarn tenacity data for Thrall, Tex

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Lankart LX571	NA	5.90	33.4	10.4	131
Lockett 77	NA	5.76	31.0	10.6	142
Pioneer Brand PR-68	NA	5.38	33.7	9.6	140
Acala SJ-5	NA	5.23	35.6	9.8	172
G+P 3774	NA	5.13	33.2	9.8	140
McNair 235	NA	5.09	36.0	8.7	134
Tamcot CAMD-3	NA	5.04	33.2	9.1	142
Stoneville 302	NA	4.92	36.7	8.4	126
Cascot B-2	NA	4.92	33.6	9.2	131
Tamcot SP37H	NA	4.64	33.8	9.1	150
Stoneville 213	NA	4.01	35.0	8.6	134

	Digital Fibrograph		Stelometer		Micronair reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Lankart LX571	1.02	0.50	183	6.0	3.85
Lockett 77	1.04	.50	189	5.2	3.25
Pioneer Brand PR-68	.99	.47	186	5.4	3.90
Acala SJ-5	1.07	.53	236	5.5	3.90
G+P 3774	1.04	.49	192	5.7	3.50
McNair 235	1.03	.48	182	4.8	4.00
Tamcot CAMD-3	.99	.46	183	5.4	3.60
Stoneville 302	.96	.45	181	5.4	3.75
Cascot B-2	1.02	.49	174	5.2	3.95
Tamcot SP37H	1.04	.50	198	4.9	3.80
Stoneville 213	1.04	.50	200	5.0	4.40

NA, Data not available.

Table 48. Blackland test: High-Volume Instrument, Colorimeter, and seed data for Thrall, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Lankart LX571	1.02	82.0	24.0	72.0	9.4
Lockett 77	1.00	81.0	22.0	72.5	8.7
Pioneer Brand PR-68	1.02	82.5	23.5	73.5	9.8
Acala SJ-5	1.04	82.0	26.5	65.2	7.4
G+P 3774	1.04	82.0	22.0	73.8	9.0
McNair 235	.98	81.0	23.0	73.0	9.1
Tamcot CAMD-3	.99	82.0	21.0	74.0	9.2
Stoneville 302	.94	80.5	23.5	71.8	9.9
Cascot B-2	1.00	80.5	21.5	69.5	9.8
Tamcot SP37H	1.02	81.5	20.5	72.5	9.0
Stoneville 213	1.04	82.5	24.0	71.5	9.2

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Lankart LX571	14.5	3.30	0.35	5.5
Lockett 77	16.4	3.50	.60	4.5
Pioneer Brand PR-68	16.0	3.74	.73	6.0
Acala SJ-5	15.8	3.55	.56	5.0
G+P 3774	15.1	3.67	.41	4.5
McNair 235	15.8	3.66	.64	5.5
Tamcot CAMD-3	16.8	3.99	.57	6.5
Stoneville 302	15.4	3.50	.56	6.0
Cascot B-2	15.4	3.63	.44	5.5
Tamcot SP37H	17.2	3.86	.51	6.0
Stoneville 213	13.6	3.24	.64	4.0

Table 49. Plains test: Yield, boll, fiber, and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Paymaster 145	412 a	4.98 f	31.7 abcd	10.9 cd	131 bcd
Lockett 77	388 ab	5.67 b	31.6 abcd	11.3 bcd	131 bcd
Stoneville 213	385 abc	5.02 f	33.0 a	11.0 cd	126 d
McNair 235	383 abcd	5.09 def	32.2 abc	10.7 d	136 bcd
Tamcot SP-21S	371 abcde	5.22 cdef	32.6 ab	11.1 cd	137 bc
Pioneer PR 68	357 abcdef	5.58 bc	31.4 abcd	11.5 bcd	138 bc
Western 44	355 abcdef	5.43 bcde	30.7 bcde	11.8 bc	134 bcd
GSA 71	346 bcdefg	5.42 bcde	30.3 cde	11.3 bcd	127 cd
Coker 5110	341 bcdefg	5.57 bc	30.8 bcde	11.5 bcd	136 bcd
Westburn M	339 bcdefg	5.67 b	30.2 cde	12.2 ab	129 bcd
Dunn 219	334 bcdefg	5.73 b	31.0 bcde	12.7 a	140 b
Paymaster 303	333 bcdefg	5.41 bcde	30.7 bcde	11.3 bcd	127 cd
Stripper 31A	321 bcdefg	5.02 f	29.3 e	11.0 cd	113 e
Deltapine SR5	319 cdefg	5.07 ef	31.4 abcd	11.1 cd	134 bcd
Tamcot 788	315 defg	5.46 bcd	30.0 de	11.1 cd	141 b
Lankart LX 571	310 efg	6.26 a	30.3 cde	12.2 ab	126 d
Acala SJ-5	300 fg	5.80 b	31.6 abcd	11.8 abc	164 a
Stoneville 302	280 g	5.10 def	33.2 a	10.6 d	130 bcd

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Paymaster 145	1.01 d	0.49 cd	190 bcde	6.2 ab	4.87 bc
Lockett 77	1.01 d	.48 cd	180 de	5.9 b	4.47 cdef
Stoneville 213	1.03 bcd	.49 cd	184 cde	6.3 ab	5.00 b
McNair 235	1.03 bcd	.49 bcd	190 bcde	6.0 b	4.85 bcd
Tamcot SP-21S	1.02 cd	.48 cd	194 bcd	6.1 ab	4.43 def
Pioneer PR 68	1.03 bcd	.50 bcd	190 bcde	6.3 ab	4.54 cdef
Western 44	.99 def	.47 d	184 cde	6.4 ab	4.27 f
GSA 71	.96 ef	.47 d	185 cde	6.6 ab	5.01 b
Coker 5110	1.05 bc	.50 bc	190 bcde	6.2 ab	4.62 bcdef
Westburn M	1.02 cd	.48 cd	191 bcde	6.9 a	4.63 bcdef
Dunn 219	1.06 b	.52 b	203 b	6.0 b	4.98 b
Paymaster 303	1.00 def	.47 d	186 cde	6.1 ab	4.78 bcde
Stripper 31A	.96 f	.47 d	176 e	6.4 ab	5.54 a
Deltapine SR5	1.00 d	.48 cd	195 bc	6.2 ab	4.61 bcdef
Tamcot 788	1.03 bcd	.49 cd	194 bcd	6.0 b	4.36 ef
Lankart LX 571	1.00 de	.48 d	186 cde	6.4 ab	4.76 bcde
Acala SJ-5	1.10 a	.54 a	224 a	6.0 b	4.51 cdef
Stoneville 302	1.00 de	.47 d	179 de	6.0 b	4.48 cdef

Table 50. Plains test: High-Volume Instrument, Colorimeter, and seed data by cotton variety

ariety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
aymaster 145	1.00 cde	82.1 ab	24.4 bc	73.2 bc	8.6 abc
ockett 77	.99 cde	81.5 b	22.9 bc	72.0 c	8.6 abc
toneville 213	1.00 cdef	81.6 b	24.0 bc	74.0 abc	8.8 abc
cNair 235	1.02 bc	81.9 b	23.7 bc	73.4 bc	8.5 bc
amcot SP-21S	1.02 bc	82.0 b	24.3 bc	76.2 a	8.7 abc
ioneer PR 68	.99 cde	81.7 b	24.2 bc	74.6 abc	8.6 abc
estern 44	.97 def	81.4 b	24.6 bc	74.5 abc	8.9 abc
SA 71	.94 f	81.5 b	24.0 bc	73.6 abc	9.0 abc
oker 5110	1.06 ab	82.2 ab	24.8 b	72.8 bc	9.1 ab
estburn M	1.02 bcd	81.7 b	23.9 bc	75.4 ab	9.0 abc
unn 219	1.07 ab	83.2 a	27.6 a	73.9 abc	8.7 abc
aymaster 303	.97 ef	81.2 b	23.7 bc	74.0 abc	8.9 abc
tripper 31A	.93 f	81.4 b	22.8 bc	75.0 ab	9.1 ab
eltapine SR5	1.00 cde	82.0 b	24.4 bc	74.1 abc	8.8 abc
amcot 788	1.02 bc	81.8 b	25.0 b	74.6 abc	8.6 abc
ankart LX 571	1.00 cde	82.3 ab	23.5 bc	73.1 bc	9.2 a
cala SJ-5	1.09 a	83.2 a	29.1 a	75.0 ab	8.4 c
toneville 302	.97 ef	81.4 b	22.3 c	74.0 abc	8.7 abc

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
aymaster 145	20.0 a	3.50 abcd	1.03 ab	5.8 abc
ockett 77	19.2 abcd	3.40 def	.87 def	5.3 cdef
toneville 213	17.8 f	3.34 f	1.11 a	4.8 f
cNair 235	19.2 abcd	3.39 ef	.94 bcde	5.4 cde
amcot SP-21S	19.7 abc	3.49 abcde	1.01 bc	5.8 abc
ioneer PR 68	19.8 ab	3.52 ab	.91 cde	5.8 abcd
estern 44	20.0 a	3.57 a	.92 cde	6.0 ab
SA 71	19.6 abc	3.43 bcdef	.99 bc	6.0 ab
oker 5110	19.1 bcd	3.50 abcd	1.05 ab	5.2 def
estburn M	19.6 abc	3.56 a	.97 bcd	6.2 a
unn 219	18.2 ef	3.41 cdef	.85 ef	5.0 ef
aymaster 303	19.6 abc	3.47 abcde	.95 bcde	5.5 bcde
tripper 31A	19.6 abc	3.39 ef	1.12 a	5.8 abc
eltapine SR5	19.8 ab	3.51 abc	.96 bcde	5.8 abcd
amcot 788	19.8 ab	3.44 bcde	.91 cde	5.8 abcd
ankart LX 571	19.0 cd	3.48 abcde	.79 f	6.1 a
cala SJ-5	20.0 a	3.49 abcde	.92 cde	5.2 ef
toneville 302	18.7 de	3.48 abcde	1.01 bc	5.3 cdef

Table 51. Plains test: Yield, boll, fiber, and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Lamesa, Tex.	511 a	4.92 b	34.6 a	9.9 d	117 b
Lubbock, Tex.	496 ab	4.63 b	35.4 a	10.3 d	111 c
Halfway, Tex.	440 ab	5.63 a	35.5 a	10.9 c	117 b
Chillicothe, Tex. (irr.)	443 b	4.59 b	35.3 a	10.8 c	NA
Chickasha, Okla. (irr.)	343 c	6.15 a	36.3 a	11.9 b	NA
Altus, Okla.	334 c	5.98 a	37.3 a	12.8 a	125 a
Chickasha, Okla. (dry)	160 d	5.64 a	18.1 a	11.6 b	122 a
Mangum, Okla. (dry)	121 d	5.79 a	17.2 a	13.0 a	NA

	Digital Fibrograph		Stelometer		Micronair reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Lamesa, Tex.	1.01 b	0.47 d	186 b	6.1 c	4.64 b
Lubbock, Tex.	.98 c	.46 d	181 c	6.7 a	4.56 b
Halfway, Tex.	.98 c	.48 c	186 b	6.4 b	4.52 b
Chillicothe, Tex. (irr.)	NA	NA	NA	NA	NA
Chickasha, Okla. (irr.)	NA	NA	NA	NA	NA
Altus, Okla.	1.08 a	.53 a	200 a	6.6 a	4.58 b
Chickasha, Okla. (dry)	1.02 b	.50 b	197 a	5.3 d	5.23 a
Mangum, Okla. (dry)	NA	NA	NA	NA	NA

NA, Data not available.

Table 52. Plains test: High-Volume Instrument, Colorimeter, and seed data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Lamesa, Tex.	0.98 c	80.8 d	24.9 ab	75.3 b	9.0 a
Lubbock, Tex.	.94 d	80.9 d	24.9 ab	78.0 a	8.8 ab
Halfway, Tex.	.98 c	81.2 c	25.6 a	76.4 ab	9.1 a
Chillicothe, Tex. (irr.)	NA	NA	NA	NA	NA
Chickasha, Okla. (irr.)	NA	NA	NA	NA	NA
Altus, Okla.	1.10 a	83.9 a	24.0 b	73.0 c	8.5 b
Chickasha, Okla. (dry)	1.03 b	82.6 b	22.7 c	67.7 d	8.5 b
Mangum, Okla. (dry)	NA	NA	NA	NA	NA

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Lamesa, Tex.	19.5 abc	3.55 b	0.98 a	5.2 bc
Lubbock, Tex.	19.4 bc	3.34 c	.99 a	5.0 c
Halfway, Tex.	20.1 a	3.29 c	.05 a	5.6 b
Chillicothe, Tex. (irr.)	18.4 d	3.56 b	.85 b	5.2 c
Chickasha, Okla. (irr.)	NA	NA	NA	NA
Altus, Okla.	19.8 ab	3.35 c	1.09 a	6.4 a
Chickasha, Okla. (dry)	19.0 cd	3.70 a	.81 b	6.2 a
Mangum, Okla. (dry)	NA	NA	NA	NA

NA, Data not available.

Table 53. Plains test: Combined yield, boll, fiber and yarn tenacity data for Halfway, Lamesa and Lubbock, Tex. by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	571 a	4.54 gh	35.7 cde	9.2 g	120 hi
McNair 235	558 a	4.73 fgh	36.6 bc	9.4 g	131 de
Paymaster 145	542 a	4.92 defg	35.7 cde	10.0 def	123 gh
Coker 5110	539 a	5.03 cdef	34.6 ef	10.2 de	134 cd
Lockett 77	535 a	5.22 bcde	35.7 cde	10.4 cd	130 def
GSA 71	503 a	5.19 bcde	33.5 ghi	11.3 b	124 fgh
Deltapine SR5	500 a	4.45 h	35.8 bcd	9.7 efg	129 defg
Tamcot SP-21S	492 a	4.71 fgh	36.9 b	10.1 def	131 def
Stripper 31A	483 a	4.80 efgh	33.0 i	10.2 de	98 j
Pioneer PR 68	482 a	5.28 bcd	34.9 def	10.4 cd	134 cd
Westburn M	479 a	5.46 bc	33.2 hi	10.9 bc	124 fgh
Dunn 219	476 a	5.59 b	35.2 def	11.9 a	138 bc
Paymaster 303	473 a	5.12 cdef	34.9 def	10.1 def	121 hi
Acala SJ-5	473 a	5.57 b	36.0 bcd	11.2 b	165 a
Western 44	461 a	4.88 defgh	34.5 fg	10.6 cd	128 defg
Lankart LX 571	456 a	6.02 a	34.6 efg	12.2 a	117 i
Tamcot 788	421 ab	5.04 cdef	34.2 fgh	9.6 fg	142 b
Stoneville 302	309 b	4.50 gh	38.4 a	9.3 g	125 efgh

Variety	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 213	1.01 d	0.48 cdef	175 fgh	6.7 abc	4.92 b
McNair 235	1.01 d	.48 cd	182 defg	6.2 c	4.58 c
Paymaster 145	.98 defgh	.47 defg	183 def	6.3 c	4.87 b
Coker 5110	1.04 bc	.49 bc	182 defg	6.6 abc	4.40 cdef
Lockett 77	.99 de	.47 cdefg	177 efgh	6.2 c	4.32 defg
GSA 71	.95 h	.46 efgh	181 defg	7.1 a	4.88 b
Deltapine SR5	.96 gh	.44 h	184 def	6.4 bc	4.45 cde
Tamcot SP-21S	1.01 d	.47 defg	190 bcd	6.2 c	4.18 fg
Stripper 31A	.90 i	.44 h	168 h	6.2 c	5.78 a
Pioneer PR 68	1.01 cd	.48 cde	186 cde	6.3 c	4.42 cdef
Westburn M	.99 def	.46 fgh	187 bcde	6.9 ab	4.33 cdefg
Dunn 219	1.05 b	.51 b	195 bc	6.6 abc	4.97 b
Paymaster 303	.97 efgh	.45 gh	180 efg	6.2 c	4.47 cd
Acala SJ-5	1.10 a	.53 a	224 a	6.1 c	4.38 cdef
Western 44	.96 fgh	.45 gh	182 defg	6.4 bc	4.22 defg
Lankart LX 571	.98 defg	.47 defg	175 fgh	7.0 ab	4.83 b
Tamcot 788	1.00 d	.46 defg	196 b	5.4 d	4.08 g
Stoneville 302	.97 efgh	.45 gh	172 gh	6.2 c	4.20 efg

Table 54. Plains test: Combined High-Volume Instrument, Colorimeter, and seed data for Halfway, Lamesa, and Lubbock, Tex. by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Stoneville 213	0.97 cde	80.5 cd	24.5 cdef	76.6 b	9.0 abcd
McNair 235	.98 cd	81.0 bcd	24.3 cdef	75.9 bc	8.9 abcd
Paymaster 145	.95 defg	81.3 bc	25.3 cde	76.4 b	8.6 cd
Coker 5110	1.02 b	81.2 bc	24.8 cdef	75.7 bc	9.1 abc
Lockett 77	.96 cdef	80.7 bcd	24.3 cdef	73.9 c	8.6 cd
GSA 71	.92 g	81.0 bcd	24.7 cdef	75.5 bc	9.3 ab
Deltapine SR5	.94 efg	80.8 bcd	23.8 def	75.9 bc	9.1 abc
Tamcot SP-21S	.99 c	80.8 bcd	25.5 cde	79.2 a	8.7 cd
Stripper 31A	.86 h	80.7 bcd	22.8 f	77.2 ab	9.2 ab
Pioneer PR 68	.98 cd	81.3 bc	25.7 cd	77.8 ab	8.8 bcd
Westburn M	.97 cde	80.3 cd	25.5 cde	76.9 ab	9.2 ab
Dunn 219	1.04 ab	82.7 a	28.2 ab	77.2 ab	8.9 abcd
Paymaster 303	.92 g	79.8 d	24.2 def	76.8 b	9.1 abc
Acala SJ-5	1.07 a	82.8 a	29.3 a	77.1 ab	8.6 d
Western 44	.92 fg	80.3 cd	25.2 cde	76.4 b	9.2 ab
Lankart LX 571	.97 cde	81.8 ab	23.3 ef	75.9 bc	9.3 a
Tamcot 788	.98 c	80.8 bcd	26.5 bc	77.5 ab	8.9 abcd
Stoneville 302	.92 g	79.8 d	23.8 def	76.2 bc	9.0 abcd

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Stoneville 213	17.5 h	3.22 h	1.27 a	4.0 f
McNair 235	19.4 def	3.28 gh	.95 de	5.2 bcde
Paymaster 145	20.6 a	3.40 bcde	1.10 bc	5.7 abc
Coker 5110	19.0 ef	3.43 abcd	1.12 bc	4.8 de
Lockett 77	19.2 def	3.27 h	.89 ef	5.0 cde
GSA 71	20.0 b	3.32 efg	1.08 bc	5.8 ab
Deltapine SR5	20.6 a	3.49 ab	1.01 cde	5.3 abcde
Tamcot SP-21S	20.0 bc	3.44 abcd	1.04 bcd	5.5 abcd
Stripper 31A	20.0 bc	3.31 efg	1.15 b	5.7 abc
Pioneer PR 68	20.0 b	3.40 cde	.96 de	5.3 abcde
Westburn M	20.2 ab	3.49 ab	1.04 bcd	5.8 ab
Dunn 219	18.9 fg	3.40 cde	.91 ef	4.7 ef
Paymaster 303	19.5 cd	3.32 efg	.94 def	4.7 ef
Acala SJ-5	20.6 a	3.50 ab	.93 def	4.8 de
Western 44	20.3 ab	3.51 a	.96 de	5.8 ab
Lankart LX 571	19.5 cde	3.45 abcd	.83 f	6.0 a
Tamcot 788	20.2 ab	3.37 def	.94 def	5.5 abcd
Stoneville 302	18.4 g	3.46 abc	1.01 cde	5.0 cde

Table 55. Plains test: Combined yield, boll, fiber, and yarn tenacity data for Chillicothe (irrigated), Tex.; Altus, Chickasha (irrigated and dryland) and Mangum (dryland), Okla. by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Paymaster 145	357 a	5.01 a	29.3 ab	11.4 c	143 ab
Lockett 77	326 ab	5.94 ab	29.3 ab	11.9 abc	132 b
Tamcot SP-21S	319 abc	5.53 bcde	30.0 ab	11.7 abc	148 ab
Western 44	310 abcd	5.76 bc	28.5 ab	12.5 abc	143 ab
McNair 235	309 abcd	5.31 cde	29.5 ab	11.5 bc	143 ab
Stoneville 213	307 abcd	5.31 cde	31.4 a	12.0 abc	134 b
Pioneer PR 68	304 abcde	5.76 bc	29.3 ab	12.2 abc	143 ab
GSA 71	280 bcdef	5.56 bcd	28.4 ab	11.3 c	131 b
Westburn M	279 bcdef	5.79 bc	28.4 ab	13.0 ab	137 ab
Paymaster 303	274 bcdef	5.59 bcd	28.2 b	12.0 abc	137 ab
Dunn 219	274 bcdef	5.82 bc	28.5 ab	13.2 a	143 ab
Tamcot 788	270 bcdef	5.72 bc	27.4 b	12.0 abc	138 ab
Stoneville 302	268 bcdef	5.46 bcde	30.1 ab	11.4 c	136 b
Lankart LX 571	259 cdef	6.40 a	27.8 b	12.2 abc	138 ab
Coker 5110	257 cdef	5.90 ab	28.6 ab	12.3 abc	139 ab
Stripper 31A	252 def	5.15 de	27.1 b	11.4 c	134 b
Deltapine SR5	243 ef	5.45 bcde	28.7 ab	12.0 abc	142 ab
Acala SJ-5	226 f	5.94 ab	28.9 ab	12.3 abc	163 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Paymaster 145	1.05 abc	0.52 ab	200 ab	6.1 abcd	4.88 ab
Lockett 77	1.02 bc	.50 b	183 b	5.4 cd	4.70 ab
Tamcot SP-21S	1.04 abc	.50 ab	199 ab	6.0 abcd	4.80 ab
Western 44	1.04 abc	.50 ab	188 ab	6.5 abc	4.35 b
McNair 235	1.07 ab	.52 ab	202 ab	5.5 bcd	5.25 a
Stoneville 213	1.06 abc	.51 ab	197 ab	5.6 abcd	5.12 ab
Pioneer PR 68	1.06 abc	.52 ab	196 ab	6.2 abcd	4.72 ab
GSA 71	.98 c	.49 b	192 ab	5.9 abcd	5.20 ab
Westburn M	1.06 abc	.51 ab	196 ab	6.8 a	5.08 ab
Paymaster 303	1.04 abc	.50 ab	196 ab	5.8 abcd	5.25 a
Dunn 219	1.09 ab	.53 ab	214 ab	5.2 d	5.00 ab
Tamcot 788	1.06 abc	.53 ab	190 ab	6.9 a	4.78 ab
Stoneville 302	1.04 abc	.51 ab	189 ab	5.6 abcd	4.90 ab
Lankart LX 571	1.03 abc	.49 b	202 ab	5.6 abcd	4.65 ab
Coker 5110	1.06 abc	.52 ab	202 ab	5.7 abcd	4.95 ab
Stripper 31A	1.05 abc	.52 ab	189 ab	6.7 ab	5.18 ab
Deltapine SR5	1.07 ab	.54 ab	212 ab	5.7 abcd	4.85 ab
Acala SJ-5	1.12 a	.56 a	223 a	5.9 abcd	4.70 ab

Table 56. Plains test: Combined High-Volume Instrument, Colorimeter, and seed data for Chillicothe (irrigated), Tex.; Altus, Chickasha (irrigated and dryland), and Mangum (dryland), Okla. by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Paymaster 145	1.08 ab	83.2 a	23.0 bcd	68.2 a	8.6 a
Lockett 77	1.04 ab	82.8 a	20.8 cd	69.1 a	8.6 a
Tamcot SP-21S	1.07 ab	83.8 a	22.5 bcd	71.8 a	8.8 a
Western 44	1.04 ab	83.0 a	23.8 bcd	71.6 a	8.5 a
McNair 235	1.08 ab	83.2 a	22.8 bcd	69.5 a	8.0 a
Stoneville 213	1.06 ab	83.2 a	23.2 bcd	70.1 a	8.4 a
Pioneer PR 68	1.01 ab	82.2 a	22.0 bcd	69.8 a	8.4 a
GSA 71	.98 b	82.2 a	23.0 bcd	70.8 a	8.6 a
Westburn M	1.10 ab	83.8 a	21.5 cd	73.1 a	8.6 a
Paymaster 303	1.03 ab	83.2 a	23.0 bcd	69.9 a	8.4 a
Dunn 219	1.10 ab	84.0 a	26.8 ab	68.9 a	8.4 a
Tamcot 788	1.08 ab	83.2 a	22.8 bcd	70.1 a	8.2 a
Stoneville 302	1.04 ab	83.8 a	20.0 d	70.6 a	8.2 a
Lankart LX 571	1.05 ab	83.0 a	23.8 bcd	68.9 a	9.0 a
Coker 5110	1.12 a	83.8 a	24.8 abcd	68.5 a	9.0 a
Stripper 31A	1.04 ab	82.5 a	22.8 bcd	71.8 a	8.9 a
Deltapine SR5	1.08 ab	83.8 a	25.2 abc	71.4 a	8.3 a
Acala SJ-5	1.12 a	83.8 a	28.8 a	72.0 a	8.2 a

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Paymaster 145	19.3 ab	3.60 abc	0.96 ab	6.0 abcd
Lockett 77	19.1 ab	3.52 abcd	.86 bcd	5.7 bcd
Tamcot SP-21S	19.4 a	3.54 abcd	.98 ab	6.2 abc
Western 44	19.7 a	3.63 ab	.87 bcd	6.2 abc
McNair 235	19.1 ab	3.49 abcd	.94 bc	5.7 bcd
Stoneville 213	18.2 bc	3.46 cd	.95 ab	5.7 bcd
Pioneer PR 68	19.5 a	3.64 a	.87 bcd	6.2 abc
GSA 71	19.1 ab	3.54 abcd	.90 bcd	6.2 abc
Westburn M	18.9 ab	3.62 ab	.89 bcd	6.5 a
Paymaster 303	19.7 a	3.62 ab	.97 ab	6.3 ab
Dunn 219	17.6 c	3.42 d	.79 cd	5.3 d
Tamcot 788	19.5 a	3.52 abcd	.88 bcd	6.0 abcd
Stoneville 302	18.9 ab	3.49 abcd	1.01 ab	5.7 bcd
Lankart LX 571	18.6 abc	3.51 abcd	.76 d	6.2 abc
Coker 5110	19.1 ab	3.57 abcd	.98 ab	5.7 bcd
Stripper 31A	19.1 ab	3.47 bcd	1.10 a	6.0 abcd
Deltapine SR5	19.1 ab	3.53 abcd	.90 bcd	6.2 abc
Acala SJ-5	19.3 ab	3.48 abcd	.92 bc	5.5 cd

Table 57. Plains test: Yield, boll, fiber and yarn tenacity data for Lamesa, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	637 a	4.30	34.8	8.8	124
Coker 5110	597 a	4.58	34.2	9.5	137
Paymaster 145	591 a	5.00	35.6	9.8	124
Deltapine SR5	585 a	4.39	35.0	9.2	135
McNair 235	577 a	4.36	36.0	9.2	134
Acala SJ-5	545 a	5.12	35.9	11.0	168
Dunn 219	524 a	5.44	33.6	11.8	144
Westburn M	514 a	5.62	33.3	10.2	129
Lockett 77	510 a	4.88	35.0	9.8	133
Pioneer PR 68	498 a	5.30	34.2	10.2	133
GSA 71	473 a	5.03	33.2	11.4	131
Tamcot SP-21S	471 a	4.80	36.1	9.8	132
Stoneville 302	468 a	4.47	38.0	8.6	130
Western 44	468 a	4.84	34.4	10.0	128
Tamcot 788	465 a	5.11	33.6	8.8	140
Stripper 31A	455 a	4.88	31.8	9.8	99
Paymaster 303	411 a	4.70	33.4	9.1	122
Lankart LX 571	404 a	5.64	34.8	11.8	119

	Digital Fibrograph		Stelometer		Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	reading
Stoneville 213	1.05	0.49	179	6.6	4.80
Coker 5110	1.06	.49	178	6.3	4.30
Paymaster 145	1.00	.47	180	5.8	5.00
Deltapine SR5	.98	.44	191	6.2	4.45
McNair 235	1.01	.46	184	6.5	4.50
Acala SJ-5	1.14	.52	231	6.1	4.45
Dunn 219	1.06	.50	194	6.6	5.00
Westburn M	1.02	.46	196	6.2	4.40
Lockett 77	1.02	.47	176	6.4	4.35
Pioneer PR 68	1.03	.47	186	5.7	4.55
GSA 71	.98	.46	182	6.6	5.15
Tamcot SP-21S	1.03	.48	189	5.8	4.45
Stoneville 302	1.01	.46	172	5.8	4.25
Western 44	.98	.45	186	6.3	4.30
Tamcot 788	1.04	.46	194	5.2	4.30
Stripper 31A	.90	.44	174	5.8	5.75
Paymaster 303	.96	.44	182	5.8	4.45
Lankart LX 571	1.00	.47	183	6.8	5.05

Table 58. Plains test: High-Volume Instrument, Colorimeter, and seed data for Lamesa, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Stoneville 213	0.98	79.5	26.0	75.5	9.0
Coker 5110	1.02	80.0	25.5	74.2	9.5
Paymaster 145	.98	82.0	24.5	74.8	8.9
Deltapine SR5	.98	81.0	25.5	74.8	9.5
McNair 235	.99	80.5	24.0	75.0	8.8
Acala SJ-5	1.10	83.0	30.0	75.0	8.5
Dunn 219	1.06	82.5	29.5	75.2	8.9
Westburn M	.98	80.0	24.5	77.0	9.0
Lockett 77	.98	80.5	24.0	72.8	9.2
Pioneer PR 68	1.01	81.5	24.5	75.8	8.8
GSA 71	.94	81.0	24.5	75.0	9.2
Tamcot SP-21S	.99	81.0	25.0	77.2	8.9
Stoneville 302	.96	79.5	23.5	75.2	8.8
Western 44	.94	81.0	24.0	76.2	9.2
Tamcot 788	1.02	81.0	26.0	75.8	9.1
Stripper 31A	.86	80.5	21.5	77.0	9.0
Paymaster 303	.90	79.0	22.0	74.5	9.2
Lankart LX 571	.96	81.5	23.5	74.8	9.4

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Stoneville 213	17.1	3.32	1.17	4.0
Coker 5110	18.5	3.63	1.01	5.0
Paymaster 145	20.3	3.60	1.08	5.5
Deltapine SR5	20.4	3.60	1.00	5.0
McNair 235	19.2	3.40	.93	5.0
Acala SJ-5	20.2	3.58	1.07	5.0
Dunn 219	18.8	3.50	.88	4.0
Westburn M	20.2	3.64	1.02	6.0
Lockett 77	19.1	3.44	.84	5.0
Pioneer PR 68	20.0	3.52	.92	5.5
GSA 71	20.2	3.46	1.06	6.0
Tamcot SP-21S	19.8	3.60	.92	5.5
Stoneville 302	18.6	3.62	1.06	5.0
Western 44	20.2	3.71	.94	5.5
Tamcot 788	20.0	3.54	.90	5.5
Stripper 31A	19.8	3.46	1.15	5.5
Paymaster 303	19.8	3.59	.93	5.0
Lankart LX 571	19.0	3.62	.74	6.0

Table 59. Plains test: Yield, boll, fiber and yarn tenacity data for Lubbock, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Paymaster 303	582 a	4.92	35.6	10.0	118
GSA 71	582 a	4.69	33.2	11.0	116
Stripper 31A	579 a	4.46	33.4	10.4	90
Paymaster 145	571 a	4.72	36.2	10.2	123
Lockett 77	569 a	4.91	36.5	10.3	124
Tamcot SP-21S	545 ab	4.34	37.0	10.0	128
McNair 235	535 ab	4.36	36.8	9.2	129
Lankart LX 571	526 ab	5.53	34.2	12.0	113
Coker 5110	523 ab	4.72	34.7	10.0	130
Stoneville 213	514 ab	4.18	36.0	9.2	119
Pioneer PR 68	512 ab	4.73	35.1	9.8	132
Western 44	505 ab	4.49	34.8	10.6	125
Westburn M	493 ab	4.68	32.7	11.1	120
Deltapine SR5	480 ab	3.88	35.2	9.8	125
Acala SJ-5	476 ab	5.12	36.4	11.1	159
Dunn 219	471 ab	4.97	36.4	11.2	128
Tamcot 788	415 b	4.52	34.0	9.7	140
Stoneville 302	50 c	4.08	38.9	9.4	124

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Paymaster 303	0.98	0.45	170	6.4	4.55
GSA 71	.92	.44	174	7.7	4.85
Stripper 31A	.90	.43	164	6.6	5.95
Paymaster 145	1.00	.47	183	6.3	4.90
Lockett 77	.98	.45	176	6.4	4.30
Tamcot SP-21S	.99	.45	194	6.4	4.15
McNair 235	1.01	.48	184	6.4	4.60
Lankart LX 571	.98	.46	164	7.6	4.60
Coker 5110	1.02	.46	180	7.0	4.40
Stoneville 213	.99	.46	176	7.1	5.00
Pioneer PR 68	1.01	.47	184	6.5	4.30
Western 44	.96	.44	176	6.6	4.20
Westburn M	.98	.46	184	7.4	4.20
Deltapine SR5	.94	.43	179	6.6	4.45
Acala SJ-5	1.06	.50	214	6.6	4.45
Dunn 219	1.04	.49	185	7.1	5.05
Tamcot 788	.98	.46	196	5.5	4.05
Stoneville 302	.96	.45	171	6.4	4.05

Table 60. Plains test: High-Volume Instrument, Colorimeter, and seed data for Lubbock, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Paymaster 303	0.92	80.5	25.5	78.2	9.1
GSA 71	.87	80.5	24.0	75.8	9.0
Stripper 31A	.84	81.0	23.5	77.2	9.3
Paymaster 145	.94	81.5	25.5	77.8	8.4
Lockett 77	.92	81.0	24.0	78.5	8.7
Tamcot SP-21S	.96	81.0	26.5	80.5	8.5
McNair 235	.98	81.0	24.0	77.5	8.7
Lankart LX 571	.95	81.0	22.5	76.8	9.2
Coker 5110	1.01	81.0	24.0	78.0	8.7
Stoneville 213	.94	81.5	22.5	78.2	8.8
Pioneer PR 68	.95	81.0	27.0	78.8	8.6
Western 44	.92	80.5	25.0	77.2	9.0
Westburn M	.94	80.5	26.5	78.2	9.2
Deltapine SR5	.90	80.5	22.0	78.2	8.8
Acala SJ-5	1.02	82.0	28.0	77.8	8.3
Dunn 219	1.01	82.0	27.0	79.0	8.8
Tamcot 788	.94	81.0	25.5	77.5	9.0
Stoneville 302	.88	79.5	24.5	78.0	8.8

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Paymaster 303	19.0	3.22	0.90	5.0
GSA 71	19.1	3.30	1.06	5.0
Stripper 31A	19.8	3.29	1.14	5.5
Paymaster 145	20.6	3.36	1.08	5.5
Lockett 77	19.0	3.22	.88	5.0
Tamcot SP-21S	19.8	3.40	1.04	5.0
McNair 235	18.9	3.28	.86	5.0
Lankart LX 571	19.2	3.34	.90	5.5
Coker 5110	18.9	3.35	1.12	4.5
Stoneville 213	17.4	3.17	1.30	4.0
Pioneer PR 68	19.8	3.36	.94	4.5
Western 44	19.7	3.38	1.02	5.5
Westburn M	19.9	3.44	1.08	5.0
Deltapine SR5	20.4	3.38	1.02	5.0
Acala SJ-5	20.4	3.47	.80	4.5
Dunn 219	18.9	3.36	.88	5.0
Tamcot 788	20.4	3.33	.92	5.0
Stoneville 302	18.3	3.42	.94	5.0

Table 61. Plains test: Yield, boll, fiber and yarn tenacity data for Halfway, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	562 a	5.48	37.0	10.0	132
Stoneville 213	557 a	5.12	36.4	9.6	116
Lockett 77	525 ab	5.86	35.6	11.1	135
Coker 5110	484 abc	5.78	34.8	11.2	136
Tamcot SP-21S	452 abc	5.00	37.5	10.4	132
Stoneville 302	443 abc	4.97	38.4	10.0	122
Paymaster 145	439 abc	5.04	35.1	10.2	124
GSA 71	436 abc	5.85	34.0	11.6	126
Pioneer PR 68	419 bc	5.82	35.4	11.2	137
Dunn 219	418 bc	6.37	35.4	12.8	142
Westburn M	414 bc	6.09	33.7	11.3	124
Deltapine SR5	411 bc	5.08	37.3	10.2	126
Paymaster 303	410 bc	5.73	35.8	11.2	122
Stripper 31A	394 bc	5.06	33.8	10.5	107
Western 44	394 bc	5.30	34.4	11.2	131
Lankart LX 571	384 bc	6.89	34.6	12.8	120
Acala SJ-5	372 c	6.46	35.7	11.4	168
Tamcot 788	371 c	5.50	35.0	10.2	148

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.00	0.50	180	5.8	4.65
Stoneville 213	.98	.48	171	6.4	4.95
Lockett 77	.99	.48	179	5.9	4.30
Coker 5110	1.02	.51	190	6.4	4.50
Tamcot SP-21S	1.00	.48	188	6.5	3.95
Stoneville 302	.94	.45	173	6.4	4.30
Paymaster 145	.94	.46	184	6.7	4.70
GSA 71	.95	.48	186	7.0	4.65
Pioneer PR 68	.99	.49	189	6.7	4.40
Dunn 219	1.04	.52	207	6.2	4.85
Westburn M	.97	.46	180	7.0	4.40
Deltapine SR5	.95	.45	182	6.4	4.45
Paymaster 303	.96	.46	186	6.5	4.40
Stripper 31A	.89	.45	164	6.3	5.65
Western 44	.94	.45	183	6.4	4.15
Lankart LX 571	.98	.48	177	6.6	4.85
Acala SJ-5	1.10	.56	228	5.8	4.25
Tamcot 788	1.00	.47	200	5.4	3.90

Table 62. Plains test: High-Volume Instrument, Colorimeter, and seed data for Halfway, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 235	0.98	81.5	25.0	75.2	9.3
Stoneville 213	.98	80.5	25.0	76.0	9.3
Lockett 77	.98	80.5	25.0	70.5	8.0
Coker 5110	1.04	82.5	25.0	74.8	9.2
Tamcot·SP-21S	1.00	80.5	25.0	79.8	8.6
Stoneville 302	.92	80.5	23.5	75.5	9.3
Paymaster 145	.92	80.5	26.0	76.8	8.6
GSA 71	.95	81.5	25.5	75.8	9.6
Pioneer PR 68	.98	81.5	25.5	79.0	8.9
Dunn 219	1.06	83.5	28.0	77.5	9.0
Westburn M	.96	80.5	25.5	75.5	9.5
Deltapine SR5	.94	81.0	24.0	74.8	9.1
Paymaster 303	.95	80.0	25.0	77.5	9.1
Stripper 31A	.86	80.5	23.5	77.2	9.4
Western 44	.92	79.5	26.5	75.8	9.4
Lankart LX 571	1.00	83.0	24.0	76.2	9.4
Acala SJ-5	1.10	83.5	30.0	78.5	9.0
Tamcot 788	1.00	80.5	28.0	79.2	8.7

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
McNair 235	18.7	3.55	0.84	5.0
Stoneville 213	18.0	3.16	1.34	4.0
Lockett 77	19.6	3.15	.95	5.0
Coker 5110	19.5	3.31	1.22	5.0
Tamcot SP-21S	20.4	3.32	1.14	6.0
Stoneville 302	17.4	3.42	.95	5.0
Paymaster 145	19.5	3.74	.93	5.5
GSA 71	20.8	3.20	1.14	6.5
Pioneer PR 68	20.4	3.30	1.02	6.0
Dunn 219	16.6	3.36	.76	4.5
Westburn M	18.4	3.62	.86	5.5
Deltapine SR5	18.0	3.55	.88	5.0
Paymaster 303	19.6	3.16	1.00	4.0
Stripper 31A	20.4	3.20	1.16	6.0
Western 44	19.0	3.76	.80	5.0
Lankart LX 571	20.2	3.38	.86	6.5
Acala SJ-5	21.2	3.43	.92	5.0
Tamcot 788	20.2	3.22	.98	6.0

Table 63. Plains test: Yield, boll, and yarn tenacity data for Chickasha, Okla. (irrigated)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Paymaster 145	523 a	5.14	38.4	12.0	NA
Tamcot SP-21S	438 ab	5.84	37.0	11.5	NA
Lockett 77	438 ab	6.74	38.0	10.5	NA
Western 44	406 abc	6.30	36.4	13.5	NA
Pioneer PR 68	404 abc	6.34	37.6	12.0	NA
Tamcot 788	394 abcd	6.60	35.0	13.0	NA
McNair 235	391 abcd	6.12	37.0	11.5	NA
Stoneville 213	378 bcde	6.00	34.7	13.0	NA
GSA 71	334 bcdef	5.56	37.3	9.5	NA
Stoneville 302	323 bcdef	6.04	38.2	12.0	NA
Paymaster 303	316 bcdef	5.92	34.5	13.0	NA
Dunn 219	309 bcdef	6.30	34.5	14.0	NA
Stripper 31A	294 cdef	5.30	34.4	11.0	NA
Coker 5110	261 def	6.46	36.6	11.0	NA
Westburn M	260 def	6.32	35.4	14.0	NA
Deltapine SR5	254 def	6.14	35.2	10.5	NA
Lankart LX 571	244 ef	6.74	37.5	10.0	NA
Acala SJ-5	208 f	6.84	36.1	11.5	NA

NA, Data not available.

Table 64. Plains test: Yield, boll, and yarn tenacity data for Chillicothe, Tex. (irrigated)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	487 a	4.27	37.1	9.6	NA
Pioneer PR 68	473 a	4.94	35.6	10.4	NA
Paymaster 145	468 a	3.78	36.0	10.2	NA
Western 44	465 a	4.70	34.2	11.0	NA
McNair 235	456 a	4.36	37.7	10.1	NA
Westburn M	451 a	4.62	33.6	11.2	NA
Lankart LX 571	448 a	5.92	35.5	11.8	NA
Dunn 219	435 a	4.82	35.2	12.0	NA
Coker 5110	432 a	4.68	35.2	11.0	NA
Stoneville 302	426 a	3.88	37.8	10.2	NA
Lockett 77	424 a	4.86	35.0	10.3	NA
Paymaster 303	424 a	4.48	34.9	10.6	NA
Tamcot SP-21S	408 a	4.28	37.8	10.2	NA
Stripper 31A	405 a	4.14	32.0	10.8	NA
Acala SJ-5	402 a	5.18	35.3	11.8	NA
GSA 71	399 a	4.60	34.2	12.0	NA
Tamcot 788	398 a	5.14	33.6	10.8	NA
Deltapine SR5	397 a	4.02	34.8	10.4	NA

NA, Data not available.

Table 65. Plains test: See data for Chillicothe, Tex. (irrigated)

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Stoneville 213	17.0	3.51	1.01	5.0
Pioneer PR 68	19.0	3.65	.84	5.5
Paymaster 145	19.5	3.74	.93	5.5
Western 44	19.0	3.76	.80	5.0
McNair 235	18.7	3.55	.84	5.0
Westburn M	18.4	3.62	.86	5.5
Lankart LX 571	17.6	3.52	.59	6.0
Dunn 219	16.6	3.36	.76	4.5
Coker 5110	19.2	3.62	.98	5.0
Stoneville 302	17.4	3.42	.95	5.0
Lockett 77	18.4	3.51	.70	5.0
Paymaster 303	18.6	3.56	.74	5.0
Tamcot SP-21S	18.8	3.65	.99	6.0
Stripper 31A	18.6	3.46	1.06	5.0
Acala SJ-5	19.6	3.54	.75	5.0
GSA 71	18.8	3.54	.85	5.5
Tamcot 788	18.8	3.50	.84	5.0
Deltapine SR5	18.0	3.55	.88	5.0

NA, Data not available.

Table 66. Plains test: Yield, boll, fiber and yarn tenacity data for Altus, Okla.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Tamcot SP-21S	412 a	6.40	39.8	13.5	140
Dunn 219	364 ab	6.10	38.2	13.0	138
Westburn M	358 ab	6.02	37.2	13.0	142
Western 44	348 ab	6.12	37.2	13.0	144
Stripper 31A	344 abc	5.32	35.6	11.0	138
Stoneville 302	344 abc	6.00	35.4	12.5	142
McNair 235	343 abc	5.90	35.8	13.0	140
Tamcot 788	343 abc	5.70	34.2	12.0	145
Paymaster 145	339 abc	6.32	35.4	13.5	154
Deltapine SR5	334 bc	5.66	38.2	13.0	140
Lockett 77	324 bc	5.94	37.1	13.0	128
Stoneville 213	323 bc	6.14	51.6	13.5	144
Lankart LX 571	322 bc	5.94	33.2	13.5	148
GSA 71	315 bc	6.02	35.7	12.5	134
Coker 5110	313 bc	6.58	34.7	13.5	132
Acala SJ-5	310 bc	5.52	39.9	11.0	148
Paymaster 303	298 bc	5.84	35.6	12.0	148
Pioneer PR 68	269 c	6.18	37.4	14.0	152

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Tamcot SP-21S	1.06	0.52	194	7.5	4.65
Dunn 219	1.10	.53	209	5.6	4.40
Westburn M	1.09	.53	197	7.4	4.75
Western 44	1.09	.52	188	7.6	4.00
Stripper 31A	1.12	.54	188	7.4	4.55
Stoneville 302	1.08	.53	196	6.1	4.70
McNair 235	1.08	.52	206	5.9	5.05
Tamcot 788	1.07	.54	204	6.8	4.75
Paymaster 145	1.10	.56	211	7.1	4.45
Deltapine SR5	1.12	.56	199	6.3	4.35
Lockett 77	1.06	.50	194	6.2	4.75
Stoneville 213	1.10	.54	206	6.2	4.45
Lankart LX 571	1.06	.51	216	6.2	4.10
GSA 71	1.00	.51	192	6.2	5.15
Coker 5110	1.07	.53	202	6.2	4.80
Acala SJ-5	1.08	.54	192	6.2	4.75
Paymaster 303	1.12	.56	205	6.8	4.60
Pioneer PR 68	1.11	.56	202	7.2	4.25

Table 67. Plains test: High-Volume Instrument, Colorimeter, and seed data for Altus, Okla.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Tamcot SP-21S	1.10	84.5	23.5	71.5	8.1
Dunn 219	1.08	84.0	24.5	73.8	8.5
Westburn M	1.14	84.5	22.0	74.8	8.2
Western 44	1.08	83.5	25.5	75.5	8.3
Stripper 31A	1.10	83.0	23.0	73.0	8.5
Stoneville 302	1.08	85.5	21.0	72.2	7.9
McNair 235	1.12	84.0	23.5	74.5	8.5
Tamcot 788	1.10	84.0	23.5	69.8	8.0
Paymaster 145	1.16	85.0	24.5	73.0	8.3
Deltapine SR5	1.14	84.0	25.0	72.8	8.2
Lockett 77	1.08	83.0	22.0	72.0	9.5
Stoneville 213	1.08	84.0	24.0	76.5	8.4
Lankart LX 571	1.08	84.5	25.5	70.8	9.0
GSA 71	1.02	82.5	24.0	73.8	8.1
Coker 5110	1.11	84.0	25.0	69.8	9.2
Acala SJ-5	1.07	83.0	25.5	74.2	9.0
Paymaster 303	1.14	84.5	26.0	74.8	8.8
Pioneer PR 68	1.06	83.5	24.0	70.8	8.2

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Tamcot SP-21S	20.4	3.26	1.20	6.0
Dunn 219	19.4	3.34	1.01	6.0
Westburn M	19.4	3.42	1.06	7.0
Western 44	20.2	3.26	1.03	7.0
Stripper 31A	19.2	3.24	1.30	6.0
Stoneville 302	20.3	3.32	1.14	5.5
McNair 235	19.2	3.35	1.06	6.0
Tamcot 788	20.6	3.37	1.03	6.5
Paymaster 145	19.3	3.32	1.11	6.5
Deltapine SR5	19.8	3.34	1.02	7.0
Lockett 77	20.3	3.36	1.10	6.0
Stoneville 213	20.0	3.38	1.03	6.5
Lankart LX 571	19.7	3.42	1.08	6.5
GSA 71	19.4	3.40	1.09	6.5
Coker 5110	19.2	3.40	1.01	6.5
Acala SJ-5	19.0	3.23	1.13	6.0
Paymaster 303	20.4	3.45	1.22	7.0
Pioneer PR 68	20.1	3.43	.96	6.5

Table 68. Plains test: Yield, boll, fiber and yarn tenacity data for Chickasha, Okla. (dryland)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Paymaster 145	276 a	4.92	19.2	10.0	132
GSA 71	238 ab	5.46	18.8	11.5	127
Lockett 77	225 bc	5.62	18.3	11.5	134
Pioneer PR 68	183 cd	5.68	18.6	11.5	134
Western 44	181 cd	5.58	17.0	12.0	142
Paymaster 303	178 cde	5.64	18.2	11.5	126
Westburn M	172 cdef	5.88	18.2	11.5	131
Tamcot SP-21S	172 cdef	5.20	18.4	11.0	156
Stoneville 213	169 def	5.14	17.7	11.0	124
McNair 235	160 defg	5.00	19.0	10.0	146
Lankart LX 571	154 defg	6.74	17.9	13.0	129
Dunn 219	131 defgh	5.94	18.2	13.0	148
Stoneville 302	131 defgh	5.96	19.9	10.5	132
Stripper 31A	122 efghi	6.16	16.8	13.0	131
Coker 5110	118 fghi	5.82	19.0	12.0	146
Deltapine SR5	110 ghi	5.40	17.0	12.0	145
Tamcot 788	92 hi	5.46	17.0	12.0	132
Acala SJ-5	71 i	5.94	16.8	12.5	178

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Paymaster 145	1.00	0.48	190	5.0	5.30
GSA 71	.96	.48	192	5.6	5.25
Lockett 77	.98	.48	172	4.6	4.65
Pioneer PR 68	1.00	.49	190	5.2	5.20
Western 44	1.00	.48	187	5.4	4.70
Paymaster 303	.96	.46	186	4.9	5.90
Westburn M	1.03	.49	196	6.3	5.40
Tamcot SP-21S	1.03	.48	204	4.5	4.95
Stoneville 213	1.02	.48	188	5.0	5.80
McNair 235	1.06	.52	197	5.1	5.45
Lankart LX 571	1.00	.47	188	5.2	5.20
Dunn 219	1.08	.53	220	4.8	5.60
Stoneville 302	1.00	.48	182	5.2	5.10
Stripper 31A	.99	.50	190	6.0	5.80
Coker 5110	1.06	.52	202	5.2	5.10
Deltapine SR5	1.03	.52	224	5.2	5.35
Tamcot 788	1.06	.52	176	7.0	4.80
Acala SJ-5	1.14	.58	255	5.6	4.65

Table 69. Plains test: High-Volume Instrument, Colorimeter, and seed data for Chickasha, Okla. (dryland)

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter' *b* value
Paymaster 145	1.00	81.5	21.5	63.5	9.0
GSA 71	.94	82.0	22.0	67.8	9.1
Lockett 77	1.02	82.5	19.5	66.2	7.7
Pioneer PR 68	.97	81.0	20.0	68.8	8.5
Western 44	.99	82.5	22.0	67.8	8.7
Paymaster 303	.92	82.0	20.0	65.0	8.1
Westburn M	1.05	83.0	21.0	71.5	8.9
Tamcot SP-21S	1.04	83.0	21.5	72.0	9.4
Stoneville 213	1.02	82.5	22.5	63.8	8.4
McNair 235	1.04	82.5	22.0	64.5	7.4
Lankart LX 571	1.03	81.5	22.0	67.0	8.9
Dunn 219	1.12	84.0	29.0	64.0	8.2
Stoneville 302	1.00	82.0	19.0	69.0	8.5
Stripper 31A	.97	82.0	22.5	70.5	9.3
Coker 5110	1.14	83.5	24.5	67.2	8.7
Deltapine SR5	1.04	83.5	25.5	70.0	8.4
Tamcot 788	1.05	82.5	22.0	70.5	8.4
Acala SJ-5	1.16	84.5	32.0	69.8	7.4

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Paymaster 145	19.2	3.73	0.82	6.0
GSA 71	19.3	3.66	.74	6.5
Lockett 77	18.7	3.70	.76	6.0
Pioneer PR 68	19.6	3.86	.80	6.5
Western 44	20.0	3.85	.78	6.5
Paymaster 303	20.0	3.86	.93	7.0
Westburn M	18.8	3.84	.78	7.0
Tamcot SP-21S	19.2	3.72	.76	6.5
Stoneville 213	17.4	3.48	.82	5.5
McNair 235	19.4	3.57	.91	6.0
Lankart LX 571	18.4	3.60	.60	6.0
Dunn 219	16.6	3.56	.60	5.5
Stoneville 302	18.9	3.74	.93	6.5
Stripper 31A	19.6	3.71	.94	7.0
Coker 5110	19.2	3.70	.95	5.5
Deltapine SR5	19.4	3.70	.80	6.5
Tamcot 788	19.0	3.68	.78	6.5
Acala SJ-5	19.3	3.68	.87	5.5

Table 70. Plains test: Yield, boll, and yarn tenacity data for Mangum, Okla. (dryland)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Lockett 77	202 a	6.54	17.8	14.0	NA
McNair 235	165 ab	5.14	18.0	13.0	NA
Paymaster 145	158 abc	4.90	17.6	11.5	NA
Pioneer PR 68	157 abc	5.66	17.4	13.0	NA
Tamcot SP-21S	149 abcd	5.92	17.0	12.5	NA
Stoneville 213	140 bcde	4.98	15.7	13.0	NA
Coker 5110	126 bcdef	5.96	17.1	14.0	NA
Paymaster 303	126 bcdef	6.04	17.6	13.0	NA
Western 44	120 bcdef	6.10	17.6	13.0	NA
Westburn M	119 bcdef	6.12	17.8	15.0	NA
Acala SJ-5	106 bcdef	6.20	16.6	14.5	NA
Tamcot 788	100 cdef	5.68	17.4	12.0	NA
Dunn 219	98 cdef	5.94	16.6	14.0	NA
Lankart LX 571	89 def	6.66	14.7	12.5	NA
GSA 71	89 def	6.14	16.0	11.0	NA
Deltapine SR5	87 def	6.02	18.3	14.0	NA
Stoneville 302	82 ef	5.44	19.2	12.0	NA
Stripper 31A	64 f	4.82	16.6	11.5	NA

NA, Data not available.

Table 71. Western test: Yield, boll, fiber, and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	1019 a	5.44 cd	37.5 ab	9.8 e	136 bcd
Acala 1517-77	989 a	5.74 bc	36.2 abc	11.9 ab	171 a
Acala 1517-75	962 a	5.60 c	35.4 c	11.8 ab	167 a
McNair 220	939 a	5.21 d	37.4 ab	9.8 e	139 bc
Acala 1517-E-2	916 a	5.56 cd	35.7 bc	12.2 a	166 a
Tamcot SP-21S	883 a	5.38 cd	38.0 a	10.7 cd	128 d
Stoneville 213	869 a	5.19 d	36.3 abc	10.5 d	129 cd
Lockett 77	837 a	6.04 ab	36.1 bc	11.3 bc	143 b
Acala SJ-5	833 a	6.20 a	36.8 abc	11.7 ab	171 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.04 b	0.51 c	178 b	5.6 ab	4.58 a
Acala 1517-77	1.13 a	.56 ab	215 a	5.6 ab	4.57 a
Acala 1517-75	1.13 a	.57 a	220 a	6.0 ab	4.05 c
McNair 220	1.04 b	.51 c	180 b	5.4 b	4.47 ab
Acala 1517-E-2	1.10 a	.55 b	210 a	5.6 ab	4.38 ab
Tamcot SP-21S	1.03 b	.50 c	171 b	6.2 a	4.20 bc
Stoneville 213	1.05 b	.51 c	180 b	6.1 ab	4.67 a
Lockett 77	1.02 b	.50 c	180 b	5.3 b	4.27 bc
Acala SJ-5	1.10 a	.55 ab	217 a	5.6 ab	4.20 bc

Table 72. Western test: High-Volume Instrument, Colorimeter, and seed data by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 235	1.04 b	81.8 abc	22.3 c	74.9 a	8.8 a
Acala 1517-77	1.15 a	83.7 a	28.0 a	73.8 a	8.3 a
Acala 1517-75	1.14 a	83.3 a	27.3 ab	73.8 a	8.2 a
McNair 220	1.04 b	81.8 abc	23.0 c	72.2 a	8.5 a
Acala 1517-E-2	1.11 a	83.3 a	26.5 ab	72.0 a	8.5 a
Tamcot SP-21S	1.02 b	80.3 c	21.8 c	73.8 a	8.2 a
Stoneville 213	1.04 b	81.3 bc	22.5 c	74.2 a	8.8 a
Lockett 77	1.02 b	82.3 ab	22.3 c	72.5 a	8.6 a
Acala SJ-5	1.10 a	83.0 ab	26.3 b	75.6 a	8.4 a

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
McNair 235	19.6 abc	3.32 c	1.06 b	5.2 a
Acala 1517-77	20.3 a	3.38 abc	1.00 bc	5.3 a
Acala 1517-75	20.0 ab	3.38 abc	.96 bc	5.3 a
McNair 220	19.2 c	3.33 bc	.98 bc	5.3 a
Acala 1517-E-2	19.2 bc	3.39 abc	.99 bc	5.2 a
Tamcot SP-21S	20.0 a	3.42 ab	1.05 b	5.3 a
Stoneville 213	17.8 d	3.22 d	1.30 a	4.3 c
Lockett 77	19.8 abc	3.31 c	.89 c	4.7 b
Acala SJ-5	19.6 abc	3.44 a	.90 c	4.3 c

Table 73. Western test: Yield, boll, fiber, and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Las Cruces, N. Mex.	1073 a	5.72 a	39.8 a	11.1 a	148 a
Artesia, N. Mex. ..	759 b	5.79 a	35.8 b	11.0 a	NA
El Paso, Tex.	NA	5.72 a	37.1 b	11.1 a	150 a
Pecos, Tex.	NA	5.16 b	33.7 c	11.1 a	152 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Las Cruces, N. Mex.	1.08 a	0.54 a	200 a	6.2 a	4.64 a
Artesia, N. Mex. ..	NA	NA	NA	NA	NA
El Paso, Tex.	1.08 a	.53 ab	190 a	5.9 b	4.01 b
Pecos, Tex.	1.06 b	.52 b	194 a	5.0 c	4.48 a

NA, Data not available.

Table 74. Western test: High-Volume Instrument, Colorimeter, and seed data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Las Cruces, N. Mex.	1.12 a	83.4 a	24.9 a	74.9 a	8.6 a
Artesia, N. Mex. ..	NA	NA	NA	NA	NA
El Paso, Tex.	1.06 b	82.0 a	23.6 b	73.5 a	8.0 b
Pecos, Tex.	1.04 b	81.6 a	24.9 a	72.5 a	8.8 a

Location	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Las Cruces, N. Mex.	19.7 a	3.46 a	1.01 a	5.7 a
Artesia, N. Mex. ..	NA	NA	NA	NA
El Paso, Tex.	19.0 b	3.33 ab	.94 a	4.6 b
Pecos, Tex.	19.8 a	3.26 b	1.10 a	4.7 b

NA, Data not available.

Table 75. Western test: Yield, boll, fiber and yarn tenacity data for Las Cruces, New Mex. (Univ. Park)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	1273 a	5.70	41.4	10.1	136
Stoneville 213	1208 ab	5.08	41.0	10.0	127
McNair 220	1173 abc	5.12	40.6	9.4	138
Acala 1517-75	1100 abc	5.98	38.5	11.8	164
Acala SJ-5	1013 abc	6.04	40.4	11.4	167
Acala 1517-77BR ...	1001 bc	6.31	37.7	12.4	160
Acala 1517-E-2	1001 bc	5.44	39.3	11.9	162
Tamcot SP-21S	957 bc	5.52	40.8	11.0	120
Lockett 77	932 c	6.25	38.8	11.8	152

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.05	0.51	190	6.0	4.80
Stoneville 213	1.07	.52	180	6.2	4.85
McNair 220	1.06	.53	190	6.2	4.70
Acala 1517-75	1.14	.58	223	6.9	4.20
Acala SJ-5	1.10	.55	228	6.0	4.45
Acala 1517-77BR ...	1.12	.57	222	6.0	4.85
Acala 1517-E-2	1.10	.54	206	6.2	4.70
Tamcot SP-21S	1.07	.52	176	6.4	4.70
Lockett 77	1.05	.52	182	5.7	4.55

Table 76. Western test: High-Volume Instrument, Colorimeter, and seed data for Las Cruces, N. Mex. (Univ. Park)

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 235	1.07	83.0	22.0	77.2	8.6
Stoneville 213	1.08	82.5	23.5	74.0	9.1
McNair 220	1.08	83.0	23.0	70.2	8.6
Acala 1517-75	1.19	84.5	28.5	76.0	8.3
Acala SJ-5	1.12	83.5	26.0	77.5	8.8
Acala 1517-77BR ...	1.15	84.0	29.0	73.5	7.8
Acala 1517-E-2	1.14	83.5	27.0	75.5	8.9
Tamcot SP-21S	1.12	81.0	23.0	77.0	8.1
Lockett 77	1.11	85.5	22.0	73.5	8.8

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
McNair 235	19.9	3.44	1.06	5.5
Stoneville 213	17.8	3.30	1.33	5.0
McNair 220	19.8	3.49	1.04	6.0
Acala 1517-75	20.1	3.46	.94	6.0
Acala SJ-5	19.8	3.54	.82	5.0
Acala 1517-77BR ...	20.4	3.47	.94	6.0
Acala 1517-E-2	19.0	3.50	1.00	6.0
Tamcot SP-21S	20.6	3.52	1.08	6.0
Lockett 77	19.5	3.46	.84	5.5

Table 77. Western test: Yield, boll, and yarn tenacity data for Artesia, New Mex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala 1517-77BR ...	977 a	5.52	36.0	10.8	NA
Acala 1517-E-2	830 ab	5.92	35.0	12.5	NA
Acala 1517-75	824 ab	5.82	35.6	12.1	NA
Tamcot SP-21S	810 ab	5.38	36.3	10.5	NA
McNair 235	765 b	5.40	36.1	9.4	NA
Lockett 77	741 b	6.18	36.0	10.9	NA
McNair 220	705 bc	5.60	36.6	9.8	NA
Acala SJ-5	653 bc	6.82	36.6	11.8	NA
Stoneville 213	529 c	5.42	33.6	11.1	NA

NA, Data not available.

Table 78. Western test: Yield, boll, fiber and yarn tenacity data for El Paso, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala SJ-5	NA	6.44	36.8	12.0	168
Lockett 77	NA	6.06	36.8	11.6	142
Acala 1517-E-2	NA	5.85	36.4	12.2	164
Tamcot SP-21S	NA	5.66	37.8	10.2	125
Acala 1517-77BR ...	NA	5.64	36.6	12.2	178
McNair 235	NA	5.56	38.6	10.0	138
Acala 1517-75	NA	5.56	37.2	11.4	167
Stoneville 213	NA	5.40	36.2	10.6	130
McNair 220	NA	5.34	37.7	10.0	140

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Acala SJ-5	1.11	0.55	206	5.7	3.90
Lockett 77	1.04	.50	182	5.6	3.90
Acala 1517-E-2	1.11	.54	210	5.6	3.95
Tamcot SP-21S	1.03	.50	164	7.4	3.55
Acala 1517-77BR ...	1.14	.56	206	5.7	4.35
McNair 235	1.06	.52	170	5.8	4.20
Acala 1517-75	1.12	.55	216	5.8	3.95
Stoneville 213	1.06	.51	182	6.1	4.30
McNair 220	1.04	.50	175	5.4	3.95

NA, Data not available.

Table 79. Western test: High-Volume Instrument, Colorimeter, and seed data for El Paso, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Acala SJ-5	1.10	83.0	25.0	72.0	7.5
Lockett 77	.99	81.5	23.0	74.2	8.3
Acala 1517-E-2	1.10	84.0	25.5	73.5	7.9
Tamcot SP-21S	1.00	81.0	20.0	76.5	8.3
Acala 1517-77BR ...	1.14	84.0	27.0	73.5	8.2
McNair 235	1.06	81.0	21.5	73.2	8.3
Acala 1517-75	1.10	83.0	26.0	74.0	7.8
Stoneville 213	1.04	80.5	21.5	74.2	7.7
McNair 220	1.03	80.5	23.0	70.5	8.1

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Acala SJ-5	19.1	3.40	0.82	4.0
Lockett 77	20.1	3.26	.85	4.0
Acala 1517-E-2	19.0	3.40	.96	4.5
Tamcot SP-21S	18.9	3.42	.86	5.0
Acala 1517-77BR ...	19.8	3.43	.90	5.0
McNair 235	19.0	3.33	.96	5.0
Acala 1517-75	19.6	3.34	.92	5.0
Stoneville 213	17.4	3.15	1.29	4.0
McNair 220	18.6	3.24	.85	5.0

Table 80. Western test: Yield, boll, fiber and yarn tenacity data for Pecos, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Lockett 77	NA	5.68	32.8	10.9	135
Acala SJ-5	NA	5.52	33.2	11.8	178
Acala 1517-77BR ...	NA	5.50	34.6	12.4	175
McNair 235	NA	5.08	33.8	9.8	136
Acala 1517-75	NA	5.04	30.2	11.8	170
Acala 1517-E-2	NA	5.01	32.2	12.2	172
Tamcot SP-21S	NA	4.97	37.1	11.2	137
Stoneville 213	NA	4.86	34.6	10.4	130
McNair 220	NA	4.78	34.6	9.8	140

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Lockett 77	1.00	0.49	175	4.6	4.35
Acala SJ-5	1.10	.54	217	5.0	4.25
Acala 1517-77BR ...	1.13	.56	216	5.0	4.50
McNair 235	1.02	.50	176	5.0	4.75
Acala 1517-75	1.14	.56	220	5.2	4.00
Acala 1517-E-2	1.10	.55	214	5.2	4.50
Tamcot SP-21S	1.00	.48	174	4.9	4.35
Stoneville 213	1.03	.50	178	5.8	4.85
McNair 220	1.01	.50	177	4.5	4.75

NA, Data not available.

Table 81. Western test: High-Volume Instrument, Colorimeter, and seed data for Pecos, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Lockett 77	0.95	80.0	22.0	69.8	8.7
Acala SJ-5	1.09	82.5	28.0	77.2	8.9
Acala 1517-77BR ...	1.14	83.0	28.0	74.2	8.9
McNair 235	1.00	81.5	23.5	74.2	9.4
Acala 1517-75	1.12	82.5	27.5	71.5	8.6
Acala 1517-E-2	1.10	82.5	27.0	67.0	8.6
Tamcot SP-21S	.96	79.0	22.5	68.0	8.1
Stoneville 213	1.02	81.0	22.5	74.5	9.6
McNair 220	1.00	82.0	23.0	75.8	8.8

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Lockett 77	19.9	3.20	0.98	4.5
Acala SJ-5	20.0	3.37	1.05	4.0
Acala 1517-77BR ...	20.7	3.24	1.16	5.0
McNair 235	19.9	3.19	1.18	5.0
Acala 1517-75	20.1	3.34	1.00	5.0
Acala 1517-E-2	19.8	3.27	1.02	5.0
Tamcot SP-21S	20.5	3.32	1.20	5.0
Stoneville 213	18.2	3.20	1.26	4.0
McNair 220	19.3	3.25	1.05	5.0

Table 82. Arizona test: Yield, boll, fiber, and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	1513 a	4.87 fgh	37.4 a	9.1 g	133 cd
Stoneville 825	1486 ab	5.09 def	34.5 de	10.7 c	116 f
Deltapine 70	1482 ab	4.67 h	35.8 b	9.2 g	135 bcd
Deltapine 55	1438 ab	5.15 de	35.8 b	9.9 de	130 cd
Deltapine 62	1420 ab	5.66 b	34.2 e	11.2 b	136 bc
Stoneville 506	1413 ab	5.13 de	34.0 e	10.9 bc	126 de
McNair 220	1402 ab	5.47 bc	34.7 cde	10.8 bc	136 bc
Stoneville 213	1396 ab	5.33 cd	34.5 de	10.7 c	119 ef
Des 56	1392 ab	5.02 efg	33.9 e	10.2 d	131 cd
McNair 235	1373 ab	5.50 bc	35.2 bcd	10.7 c	128 cd
Deltapine 90	1355 b	4.99 fg	35.3 bcd	9.7 ef	143 b
AZ 7209-107	1352 b	6.18 a	35.4 bc	11.8 a	133 cd
Lockett 77	1004 d	6.13 a	33.0 f	11.7 a	130 cd
Acala SJ-5	977 d	6.21 a	34.1 e	12.1 a	158 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 41	1.14 bc	0.53 bc	192 cde	5.4 bcd	4.83 bcd
Stoneville 825	1.12 cd	.51 c	175 fg	4.6 e	5.03 ab
Deltapine 70	1.12 bcd	.52 bc	198 bc	5.2 bcd	4.88 abcd
Deltapine 55	1.13 bcd	.50 c	185 cdefg	5.1 cd	4.53 ef
Deltapine 62	1.19 a	.55 ab	200 bc	5.2 cd	5.05 ab
Stoneville 506	1.13 bcd	.52 c	177 efg	5.4 bc	4.98 abc
McNair 220	1.08 e	.52 c	196 c	4.7 e	5.07 ab
Stoneville 213	1.13 bcd	.53 bc	178 defg	5.9 a	5.10 a
Des 56	1.11 d	.52 bc	193 cd	5.3 bcd	4.90 abcd
McNair 235	1.13 bcd	.53 bc	189 cdef	4.9 de	4.88 abcd
Deltapine 90	1.15 b	.53 bc	212 b	5.2 bcd	4.95 abc
AZ 7209-107	1.12 cd	.52 bc	200 bc	5.6 ab	4.73 cde
Lockett 77	1.06 f	.48 d	172 g	4.9 de	4.48 f
Acala SJ-5	1.18 a	.56 a	235 a	5.0 de	4.68 def

Table 83. Arizona test: High-Volume Instrument and Colorimeter data by cotton variet

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 41	1.16 ab	82.2 abc	24.5 bc	73.8 bcd	8.2 cde
Stoneville 825	1.14 bc	82.2 abc	22.2 de	73.0 bcd	8.3 bcde
Deltapine 70	1.15 ab	83.0 a	22.8 cde	71.8 cd	8.8 ab
Deltapine 55	1.12 bc	81.0 c	22.8 cde	75.2 abcd	8.1 de
Deltapine 62	1.19 a	82.5 ab	25.3 b	78.3 a	8.0 e
Stoneville 506	1.14 bc	81.7 bc	24.2 bcd	74.6 abcd	8.0 e
McNair 220	1.10 c	82.7 ab	22.2 de	71.2 d	8.6 abcd
Stoneville 213	1.14 abc	82.3 ab	23.2 cde	73.6 bcd	8.8 ab
Des 56	1.12 bc	82.5 ab	24.0 bcd	73.2 bcd	8.7 abc
McNair 235	1.12 bc	82.8 ab	23.2 cde	74.8 abcd	8.7 abc
Deltapine 90	1.15 ab	82.3 ab	26.0 b	74.8 abcd	8.8 abc
AZ 7209-107	1.12 bc	82.7 ab	25.2 b	73.6 bcd	9.1 a
Lockett 77	1.05 d	81.7 bc	21.8 f	76.2 ab	8.6 abcd
Acala SJ-5	1.16 ab	83.3 a	28.5 a	75.7 abc	8.9 ab

Table 84. Arizona test: Yield, boll, fiber, and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Phoenix, Ariz.	1486 a	5.28 a	34.6 a	10.7 a	133 a
Marana, Ariz.	1229 b	5.61 a	35.0 a	10.9 a	132 a
Yuma, Ariz.	NA	5.27 a	34.9 a	10.3 a	132 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Phoenix, Ariz.	1.13 a	0.53 a	194 a	5.0 b	5.11 a
Marana, Ariz.	1.16 a	.54 a	192 a	5.7 a	4.66 b
Yuma, Ariz.	1.09 b	.50 b	194 a	4.8 b	4.83 ab

NA, Data not available.

Table 85. Arizona test: High-Volume Instrument and Colorimeter data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Phoenix, Ariz.	1.14 a	82.5 a	24.1 a	73.0 a	8.5 ab
Marana, Ariz.	1.17 a	82.6 a	24.5 a	75.1 a	8.7 a
Yuma, Ariz.	1.08 b	82.0 a	23.4 a	74.7 a	8.4 b

Table 86. Arizona test: Yield, boll, fiber and yarn tenacity data for Phoenix, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 70	1657 a	4.65	36.0	9.0	136
Deltapine 62	1613 a	5.73	34.0	11.3	140
Deltapine 41	1592 a	4.82	37.4	9.2	134
McNair 220	1591 a	5.22	34.2	11.1	130
Deltapine 55	1575 a	5.12	35.6	10.2	135
AZ 7209-107	1567 a	6.08	35.2	11.8	132
Stoneville 506	1537 a	5.08	33.6	11.0	127
McNair 235	1524 ab	5.40	34.6	10.8	128
Stoneville 825	1520 ab	5.00	34.0	10.8	114
Deltapine 90	1519 ab	4.82	35.2	9.4	140
Stoneville 213	1511 ab	5.22	34.2	10.9	117
Des 56	1391 ab	4.82	33.6	10.2	137
Acala SJ-5	1112 c	5.92	34.0	12.0	158
Lockett 77	1090 c	6.05	32.6	11.8	128

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 70	1.10	0.52	200	5.1	5.15
Deltapine 62	1.19	.56	204	5.0	5.25
Deltapine 41	1.16	.54	195	4.9	5.00
McNair 220	1.09	.52	198	4.3	5.45
Deltapine 55	1.14	.52	186	5.2	4.85
AZ 7209-107	1.13	.55	202	5.4	4.90
Stoneville 506	1.12	.51	172	5.2	5.20
McNair 235	1.14	.53	184	5.1	5.15
Stoneville 825	1.11	.50	178	4.2	5.15
Deltapine 90	1.14	.53	210	5.0	5.30
Stoneville 213	1.14	.54	177	5.8	5.25
Des 56	1.10	.53	196	5.0	5.30
Acala SJ-5	1.18	.56	244	5.1	4.90
Lockett 77	1.04	.48	165	5.0	4.65

Table 87. Arizona test: High-Volume Instrument and Colorimeter data for Phoenix, Ariz.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 70	1.17	82.5	22.0	71.5	8.9
Deltapine 62	1.22	83.5	27.0	79.2	7.7
Deltapine 41	1.15	82.0	25.0	69.2	8.1
McNair 220	1.12	83.5	22.5	67.0	8.6
Deltapine 55	1.13	80.5	23.0	75.5	8.2
AZ 7209-107	1.12	83.0	26.0	74.0	9.3
Stoneville 506	1.16	82.0	24.0	73.0	8.1
McNair 235	1.12	83.0	23.0	73.0	8.8
Stoneville 825	1.16	83.5	21.0	71.5	8.2
Deltapine 90	1.13	82.0	26.0	71.5	8.7
Stoneville 213	1.15	82.5	22.5	73.0	8.5
Des 56	1.09	82.0	24.0	72.8	8.8
Acala SJ-5	1.17	83.5	29.0	75.2	8.8
Lockett 77	1.06	81.0	22.0	76.0	8.9

Table 88. Arizona test: Yield, boll, fiber and yarn tenacity data for Marana, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 825	1457 a	5.45	34.6	11.2	120
Deltapine 41	1433 ab	5.14	37.4	9.4	130
Des 56	1394 abc	5.30	34.2	10.5	130
Deltapine 70	1308 bcd	4.88	35.1	9.6	134
Deltapine 55	1300 bcd	5.24	36.1	10.2	127
Stoneville 506	1288 cd	5.38	34.6	11.4	125
Stoneville 213	1280 cd	5.62	34.8	11.0	120
Deltapine 62	1226 de	5.85	33.8	11.4	136
McNair 235	1222 de	5.67	35.7	10.8	130
McNair 220	1214 de	5.62	35.1	10.8	142
Deltapine 90	1190 de	5.20	35.2	10.2	146
AZ 7209-107	1137 e	6.42	35.1	12.3	130
Lockett 77	919 f	6.42	33.6	11.8	137
Acala SJ-5	841 f	6.35	34.9	12.2	148

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 825	1.16	0.54	180	5.3	4.95
Deltapine 41	1.16	.52	190	6.0	4.55
Des 56	1.16	.54	182	5.8	4.55
Deltapine 70	1.17	.56	191	5.7	4.55
Deltapine 55	1.15	.53	184	5.6	4.35
Stoneville 506	1.16	.54	180	5.8	5.05
Stoneville 213	1.14	.52	176	6.7	4.90
Deltapine 62	1.22	.56	196	5.9	4.80
McNair 235	1.15	.54	194	5.6	4.55
McNair 220	1.10	.53	196	5.2	4.80
Deltapine 90	1.16	.53	204	5.6	4.60
AZ 7209-107	1.15	.53	196	6.0	4.65
Lockett 77	1.11	.51	196	5.4	4.45
Acala SJ-5	1.20	.56	221	5.4	4.45

Table 89. Arizona test: High-Volume Instrument and Colorimeter data for Marana, Ariz

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Stoneville 825	1.16	81.5	23.5	71.2	8.9
Deltapine 41	1.23	82.0	24.5	76.8	8.5
Des 56	1.20	83.5	25.0	72.2	8.5
Deltapine 70	1.20	83.5	24.5	70.5	9.2
Deltapine 55	1.16	82.0	21.0	73.8	8.2
Stoneville 506	1.14	82.0	24.5	74.5	8.4
Stoneville 213	1.20	82.5	23.5	75.5	9.2
Deltapine 62	1.20	82.5	25.5	78.5	8.7
McNair 235	1.17	83.5	24.0	75.8	8.6
McNair 220	1.10	82.5	22.0	72.8	8.4
Deltapine 90	1.18	82.0	27.5	77.0	8.8
AZ 7209-107	1.17	83.0	24.5	76.5	9.0
Lockett 77	1.12	82.5	23.5	78.5	8.5
Acala SJ-5	1.18	83.5	29.0	77.8	8.7

Table 90. Arizona test: Yield, boll, fiber and yarn tenacity data for Yuma, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala SJ-5	NA	6.36	33.6	12.2	168
AZ 7209-107	NA	6.04	35.8	11.3	137
Lockett 77	NA	5.92	32.8	11.6	126
McNair 220	NA	5.56	34.6	10.4	134
McNair 235	NA	5.42	35.4	10.3	128
Deltapine 62	NA	5.40	34.7	10.8	132
Stoneville 213	NA	5.15	34.5	10.2	120
Deltapine 55	NA	5.10	35.8	9.4	130
Des 56	NA	4.95	34.0	10.0	126
Deltapine 90	NA	4.95	35.3	9.4	142
Stoneville 506	NA	4.92	33.6	10.2	127
Stoneville 825	NA	4.82	35.0	10.2	114
Deltapine 41	NA	4.65	37.4	8.7	136
Deltapine 70	NA	4.47	36.3	8.7	135

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Acala SJ-5	1.14	0.55	240	4.4	4.70
AZ 7209-107	1.07	.50	204	5.4	4.65
Lockett 77	1.01	.44	155	4.4	4.35
McNair 220	1.04	.50	194	4.6	4.95
McNair 235	1.09	.52	190	4.2	4.95
Deltapine 62	1.16	.53	200	4.6	5.10
Stoneville 213	1.10	.52	180	5.2	5.15
Deltapine 55	1.08	.47	185	4.6	4.40
Des 56	1.06	.51	201	5.1	4.85
Deltapine 90	1.14	.52	224	5.0	4.95
Stoneville 506	1.09	.50	178	5.2	4.70
Stoneville 825	1.08	.50	168	4.3	5.00
Deltapine 41	1.10	.53	192	5.2	4.95
Deltapine 70	1.09	.50	201	4.8	4.95

NA, Data not available.

Table 91. Arizona test: High-Volume Instrument and Colorimeter data for Yuma, Ari

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter' *b* value
Acala SJ-5	1.14	83.0	27.5	74.0	9.1
AZ 7209-107	1.06	82.0	25.0	70.2	9.0
Lockett 77	.96	81.5	20.0	74.2	8.5
McNair 220	1.06	82.0	22.0	74.0	8.9
McNair 235	1.08	82.0	22.5	75.5	8.8
Deltapine 62	1.14	81.5	23.5	77.2	7.6
Stoneville 213	1.08	82.0	23.5	72.2	8.8
Deltapine 55	1.08	80.5	24.5	76.2	7.9
Des 56	1.06	82.0	23.0	74.8	8.8
Deltapine 90	1.12	83.0	24.5	76.0	8.9
Stoneville 506	1.10	81.0	24.0	76.2	7.5
Stoneville 825	1.09	81.5	22.0	76.2	7.8
Deltapine 41	1.10	82.5	24.0	75.2	8.0
Deltapine 70	1.09	83.0	22.0	73.2	8.4

Table 92. San Joaquin test: Yield, boll, fiber, and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala SJ-5	1320 a	7.23 a	38.7 ab	12.6 a	170 a
McNair 235	1197 b	5.35 b	41.0 a	10.1 a	136 bc
Acala SJ-2	1175 b	7.51 a	38.6 ab	12.3 a	152 b
Stoneville 213	1164 b	5.79 ab	40.2 a	10.1 a	120 c
Lockett 77	957 c	6.57 ab	36.1 b	11.4 a	134 c

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Acala SJ-5	1.13 a	0.52 a	237 a	5.5 b	4.30 a
McNair 235	1.07 b	.48 ab	188 c	5.4 b	4.18 a
Acala SJ-2	1.12 a	.50 ab	218 b	5.5 b	4.12 a
Stoneville 213	1.06 b	.48 ab	178 c	6.3 a	4.20 a
Lockett 77	1.06 b	.46 b	182 c	5.4 b	3.12 b

Table 93. San Joaquin test: High-Volume Instrument, Colorimeter, and seed data by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Acala SJ-5	1.14 a	82.5 a	29.2 a	77.0 a	8.2 b
McNair 235	1.08 b	80.8 c	24.5 b	75.1 a	8.2 b
Acala SJ-2	1.13 a	81.8 b	29.0 a	73.2 a	9.0 a
Stoneville 213	1.05 b	80.2 d	23.5 b	75.4 a	8.8 ab
Lockett 77	1.05 b	79.2 e	24.5 b	76.1 a	8.6 ab

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Acala SJ-5	20.3 a	3.76 a	0.88 c	5.8 a
McNair 235	18.8 ab	3.64 ab	1.01 bc	6.2 a
Acala SJ-2	17.4 b	3.42 c	1.12 b	4.2 b
Stoneville 213	17.0 b	3.52 bc	1.25 a	5.5 ab
Lockett 77	17.8 b	3.63 ab	.89 c	6.0 a

Table 94. San Joaquin test: Yield, boll, fiber, and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
West Side Field Station, Calif. .	1318 a	6.34 a	39.1 a	10.6 a	148 a
Shafter, Calif. ...	1007 b	6.64 a	38.7 a	11.9 a	136 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
West Side Field Station, Calif. .	1.09 a	0.49 a	206 a	5.7 a	3.81 b
Shafter, Calif. ...	1.08 a	.49 a	195 b	5.6 a	4.16 a

Table 95. San Joaquin test: High-Volume Instrument, Colorimeter, and seed data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter' *b* value
West Side Field Station, Calif. .	1.09 a	81.1 a	26.2 a	76.1 a	8.8 a
Shafter, Calif. ...	1.09 a	80.7 a	26.1 a	75.0 a	8.3 a

Location	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
West Side Field Station, Calif. .	18.6 a	3.50 b	1.08 a	5.6 a
Shafter, Calif. ...	17.9 a	3.69 a	.98 a	5.5 a

Table 96. San Joaquin test: Yield, boll, fiber and yarn tenacity data for West Side Field Station, Calif.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala SJ-5	1502 a	6.73	38.4	12.0	173
Stoneville 213	1341 b	5.80	39.4	9.5	131
Acala SJ-2	1338 b	7.92	39.0	12.7	154
McNair 235	1317 b	5.34	41.2	9.1	139
Lockett 77	1091 c	5.89	37.5	9.9	144

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Acala SJ-5	1.13	0.52	246	5.5	4.20
Stoneville 213	1.06	.48	180	6.4	3.90
Acala SJ-2	1.12	.50	228	5.4	4.05
McNair 235	1.06	.48	192	5.6	3.90
Lockett 77	1.08	.48	182	5.6	3.00

Table 97. San Joaquin test: High-Volume Instrument, Colorimeter, and seed data for West Side Field Station, Calif.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Acala SJ-5	1.13	82.5	29.0	77.8	8.4
Stoneville 213	1.07	80.5	24.0	77.0	9.0
Acala SJ-2	1.13	82.0	29.0	71.2	9.1
McNair 235	1.08	81.0	24.5	77.0	8.7
Lockett 77	1.05	79.5	24.5	77.5	9.0

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Acala SJ-5	21.1	3.68	0.98	6.0
Stoneville 213	17.6	3.42	1.33	6.0
Acala SJ-2	17.8	3.34	1.18	4.0
McNair 235	18.8	3.49	1.04	6.0
Lockett 77	17.5	3.56	.90	6.0

Table 98. San Joaquin test: Yield, boll, fiber and yarn tenacity data for Shafter, Calif.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala SJ-5	1138 a	7.72	39.0	13.1	167
McNair 235	1076 a	5.36	40.8	11.1	133
Acala SJ-2	1012 a	7.08	38.2	11.9	150
Stoneville 213	988 a	5.77	40.8	10.6	109
Lockett 77	822 a	7.24	34.6	12.8	124

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Acala SJ-5	1.13	0.53	228	5.5	4.40
McNair 235	1.07	.48	184	5.2	4.45
Acala SJ-2	1.12	.51	207	5.6	4.20
Stoneville 213	1.05	.48	176	6.3	4.50
Lockett 77	1.04	.44	182	5.3	3.25

Table 99. San Joaquin test: High-Volume Instrument, Colorimeter, and seed data for Shafter, Calif.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Acala SJ-5	1.15	82.5	29.5	76.2	8.1
McNair 235	1.08	80.5	24.5	73.2	7.8
Acala SJ-2	1.12	81.5	29.0	75.2	8.8
Stoneville 213	1.03	80.0	23.0	75.8	8.7
Lockett 77	1.04	79.0	24.5	74.8	8.2

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Acala SJ-5	19.5	3.84	0.80	5.5
McNair 235	18.7	3.80	.98	6.5
Acala SJ-2	16.9	3.50	1.06	4.5
Stoneville 213	16.4	3.62	1.18	5.0
Lockett 77	18.0	3.70	.88	6.0

Table 100. High Quality test: Yield, boll, fiber, and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310	1237 a	5.85 cde	40.5 abc	10.6 cde	154 cde
Deltapine 90	1224 ab	5.42 fg	41.1 ab	9.7 f	151 cdef
Stoneville 1084 ...	1202 ab	5.29 gh	37.4 e	10.9 bcd	151 cdef
McNair 235	1200 ab	5.85 cde	40.2 bcd	10.3 e	145 fg
NK 2019	1190 abc	6.11 bc	40.1 bcd	10.8 bcde	143 g
Deltapine 712-227 .	1176 abcd	5.17 gh	40.5 abc	9.5 f	146 fg
Stoneville 213	1171 abcd	5.66 def	40.0 cd	10.4 e	131 h
Coker 80903	1170 abcd	6.08 c	40.0 cd	11.0 bc	155 c
GaT 75-3712	1170 abcd	5.72 def	39.3 d	11.1 bc	148 defg
MD 82ne	1161 abcd	6.09 c	41.4 a	11.1 b	143 g
PD 6044	1161 abcd	5.44 fg	39.8 cd	10.6 cde	160 b
Coker 81104	1152 abcd	5.88 cde	41.2 a	10.9 bcd	154 cd
Stoneville 677	1149 abcd	5.06 hi	37.9 e	10.9 bcd	144 g
PD 6186	1136 abcd	5.31 gh	40.1 bcd	10.4 e	166 a
PD 6132	1130 abcd	4.83 i	41.2 a	10.4 de	167 a
La 434-RKR	1116 bcd	5.82 cde	39.6 cd	11.2 b	152 cde
PD 6992	1083 cd	5.98 cd	38.2 e	10.6 cde	156 bc
Stoneville 1173 ...	1077 cd	6.44 a	38.4 e	11.9 a	148 efg
Coker 2901	1074 d	5.64 ef	39.7 cd	10.9 bcd	156 bc
Acala SJ-5	561 e	6.40 ab	37.6 e	11.8 a	168 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Coker 310	1.17 abc	0.56 abcd	198 efg	5.68 g	4.45 defg
Deltapine 90	1.11 i	.54 ef	206 de	6.14 f	4.68 bcd
Stoneville 1084 ...	1.17 ab	.56 abcd	205 def	5.71 g	4.62 cde
McNair 235	1.12 ghi	.53 f	198 efg	5.71 g	4.61 cde
NK 2019	1.14 efgh	.54 ef	191 gh	5.72 g	4.96 a
Deltapine 712-227 .	1.11 i	.54 ef	203 def	7.26 b	4.64 cde
Stoneville 213	1.11 i	.53 f	184 h	6.65 cde	4.89 ab
Coker 80903	1.14 def	.55 cdef	203 def	5.64 g	4.33 fgh
GaT 75-3712	1.15 bcde	.55 bcde	201 ef	6.12 f	4.48 cdefg
MD 82ne	1.13 fghi	.55 bcd	202 def	8.29 a	4.18 h
PD 6044	1.15 cde	.56 ab	215 bc	6.33 ef	4.44 defg
Coker 81104	1.12 hi	.54 def	204 def	5.55 g	4.74 abc
Stoneville 677	1.18 a	.56 abc	196 fg	6.34 ef	4.65 cd
PD 6186	1.16 abcd	.57 a	228 a	6.94 bc	4.58 cdef
PD 6132	1.15 bcde	.57 a	225 a	5.68 g	4.51 cdefg
La 434-RKR	1.15 bcde	.54 def	201 ef	6.80 cd	4.27 gh
PD 6992	1.15 cde	.55 cdef	211 cd	6.47 def	4.56 cdef
Stoneville 1173 ...	1.16 abcd	.56 abcd	199 efg	6.27 f	4.96 a
Coker 2901	1.14 efg	.54 def	204 def	5.63 g	4.37 efgh
Acala SJ-5	1.15 bcde	.56 abcd	222 ab	5.71 g	4.28 gh

Table 101. High Quality test: High-Volume Instrument, Colorimeter, and seed data by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Coker 310	1.20 abcd	83.5 cd	26.3 ef	73.9 abcd	8.1 bcde
Deltapine 90	1.13 hi	83.6 bcd	27.6 bcde	75.0 abc	8.0 bcdef
Stoneville 1084 ...	1.20 abc	83.6 bcd	27.9 bcd	74.0 abcd	7.7 efg
McNair 235	1.15 ghi	83.5 cd	25.5 fg	73.8 abcd	8.0 bcdef
NK 2019	1.17 efg	83.1 d	26.2 ef	75.6 ab	8.0 bcdef
Deltapine 712-227 .	1.13 hi	83.6 bcd	26.0 ef	74.5 abcd	8.0 bcdef
Stoneville 213	1.13 i	83.2 d	24.2 g	75.1 abc	8.2 bcd
Coker 80903	1.18 bcde	83.2 d	26.4 def	73.3 bcd	8.1 bcde
GaT 75-3712	1.18 cdef	83.8 abcd	26.0 ef	74.4 abcd	8.0 bcdef
MD 82ne	1.14 hi	83.8 abcd	26.6 cdef	73.1 cd	8.8 a
PD 6044	1.18 def	84.4 ab	28.1 bc	73.4 bcd	8.0 cdef
Coker 81104	1.15 ghi	83.8 abcd	26.4 def	74.4 abcd	8.4 bc
Stoneville 677	1.21 ab	83.8 abcd	25.8 f	75.3 abc	8.0 bcdef
PD 6186	1.19 bcde	84.6 a	30.1 a	72.6 d	8.4 b
PD 6132	1.18 cde	84.6 a	28.6 b	73.7 abcd	7.8 defg
La 434-RKR	1.18 cdef	83.1 d	26.2 ef	75.8 a	7.7 fg
PD 6992	1.19 bcd	83.6 bcd	28.8 ab	74.9 abcd	8.1 bcde
Stoneville 1173 ...	1.22 a	84.2 abc	28.4 b	76.0 a	7.5 g
Coker 2901	1.16 fgh	83.2 d	26.1 ef	73.8 abcd	8.1 bcde
Acala SJ-5	1.18 def	84.6 a	28.9 ab	75.4 abc	8.1 bcde

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Coker 310	20.5 bcde	3.12 abc	1.45 bcd	4.2 bcd
Deltapine 90	21.0 abc	3.04 cd	1.43 bcde	5.8 a
Stoneville 1084 ...	19.5 f	2.96 d	1.54 ab	3.8 cd
McNair 235	20.8 abcd	3.05 cd	1.30 e	5.0 ab
NK 2019	21.0 abc	3.04 cd	1.61 a	4.5 bcd
Deltapine 712-227 .	19.7 ef	3.04 cd	1.38 cde	4.8 abc
Stoneville 213	18.4 g	3.12 abcd	1.42 bcde	4.0 bcd
Coker 80903	21.0 abc	3.09 bcd	1.33 de	3.5 d
GaT 75-3712	20.9 abc	3.02 cd	1.40 cde	4.2 bcd
MD 82ne	20.5 bcde	3.23 ab	1.45 bcd	5.0 ab
PD 6044	21.1 abc	3.06 cd	1.41 bcde	4.0 bcd
Coker 81104	19.5 f	3.23 ab	1.34 de	4.0 bcd
Stoneville 677	19.9 def	3.00 cd	1.48 abc	3.8 cd
PD 6186	21.3 ab	3.04 cd	1.50 abc	4.2 bcd
PD 6132	21.7 a	3.09 bcd	1.45 bcd	5.0 ab
La 434-RKR	21.1 abc	3.06 cd	1.41 bcde	4.5 bcd
PD 6992	21.1 abc	2.97 cd	1.40 cde	4.0 bcd
Stoneville 1173 ...	21.2 abc	3.01 cd	1.41 bcde	4.8 abc
Coker 2901	20.2 cdef	3.10 abcd	1.41 bcde	4.0 bcd
Acala SJ-5	20.5 bcde	3.24 a	1.07 f	4.2 bcd

Table 102. High Quality test: Yield, boll, fiber, and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Tifton, Ga.	1449 a	5.70 a	39.9 c	NA	NA
St. Joseph, La.	1407 ab	5.11 b	42.8 a	9.9 c	149 d
Belle Mina, Ala. ...	1373 ab	6.20 a	40.9 b	11.4 a	149 d
Florence, S.C.	1345 b	5.71 a	39.9 c	10.3 bc	145 e
Rocky Mt., N.C.	1213 c	6.10 a	43.2 a	10.2 bc	NA
Portageville, Mo. ..	1175 c	6.12 a	40.0 c	11.7 a	145 e
Stoneville, Miss. ..	974 d	5.76 a	38.0 d	10.7 b	154 c
Jackson, Tenn.	927 d	6.14 a	38.4 d	11.8 a	159 b
College Station, Tex.	923 d	4.47 c	34.3 e	9.9 c	163 a
Rohwer, Ark.	582 e	NA	NA	NA	NA

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Tifton, Ga.	NA	NA	NA	NA	NA
St. Joseph, La.	1.16 bc	0.56 b	205 b	5.7 d	4.74 b
Belle Mina, Ala. ...	1.15 c	.55 c	190 c	7.1 a	4.67 b
Florence, S.C.	1.12 d	.53 e	203 b	6.6 b	4.35 c
Rocky Mt., N.C.	NA	NA	NA	NA	NA
Portageville, Mo. ..	1.12 d	.54 d	206 b	6.7 b	5.14 a
Stoneville, Miss. ..	1.18 a	.55 c	203 b	5.8 cd	4.35 c
Jackson, Tenn.	1.18 ab	.59 a	204 b	6.0 c	4.72 b
College Station, Tex.	1.09 e	.54 d	221 a	5.7 d	3.96 d
Rohwer, Ark.	NA	NA	NA	NA	NA

NA, Data not available.

Table 103. High Quality test: High-Volume Instrument, Colorimeter, and seed data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Tifton, Ga.	NA	NA	NA	NA	NA
St. Joseph, La.	1.15 b	84.0 abc	25.2 c	74.9 c	81.0 c
Belle Mina, Ala. ...	1.20 a	84.2 ab	27.9 ab	79.2 a	57.4 d
Florence, S.C.	1.17 b	83.4 cd	26.9 b	77.2 b	85.6 ab
Rocky Mt., N.C.	NA	NA	NA	NA	NA
Portageville, Mo. ..	1.16 b	83.2 d	28.8 a	70.4 d	84.8 b
Stoneville, Miss. ..	1.21 a	83.2 d	25.0 c	74.7 c	80.7 c
Jackson, Tenn.	1.22 a	84.6 a	27.4 b	75.8 c	87.0 a
College Station, Tex.	1.10 c	83.7 bcd	27.9 ab	68.5 e	87.2 a
Rohwer, Ark.	NA	NA	NA	NA	NA

Location	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Tifton, Ga.	NA	NA	NA	NA
St. Joseph, La.	20.9 a	2.99 a	1.42 a	5.4 a
Belle Mina, Ala. ...	NA	NA	NA	NA
Florence, S.C.	20.2 a	3.16 a	1.40 a	3.4 b
Rocky Mt., N.C.	NA	NA	NA	NA
Portageville, Mo. ..	NA	NA	NA	NA
Stoneville, Miss. ..	NA	NA	NA	NA
Jackson, Tenn.	NA	NA	NA	NA
College Station, Tex.	NA	NA	NA	NA
Rohwer, Ark.	NA	NA	NA	NA

Table 104. High Quality test: Combined yield, boll, fiber and yarn tenacity data for Tifton, Ga.; Belle Mina, Ala.; Florence, S.C.; and Rocky Mount., N.C. by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 90	1487 a	5.54 defg	41.9 bc	9.8 de	149 cdef
Coker 310	1480 a	6.08 bcd	41.9 bc	10.4 cde	151 bcdef
PD 6044	1452 ab	5.53 defg	41.6 bcd	10.2 cde	155 abc
PD 6186	1432 abc	5.37 fg	42.2 ab	9.8 de	159 ab
Coker 80903	1423 abcd	6.40 abc	41.6 bcd	10.7 bcde	151 bcde
PD 6132	1407 abcd	5.03 g	43.2 a	10.0 cde	163 a
NK 2019	1406 abcd	6.43 ab	41.5 bcd	10.7 bcde	139 ghi
McNair 235	1394 abcd	6.04 bcd	41.2 cd	10.2 cde	136 hi
Stoneville 1084 ...	1374 abcd	5.48 efg	38.6 gh	11.0 abcd	146 defg
GaT 75-3712	1373 abcd	6.07 bcd	40.7 de	10.9 bcd	146 defg
Coker 81104	1367 abcde	6.02 bcde	43.0 a	10.8 bcde	144 efgh
Deltapine 712-227 .	1350 abcde	5.55 defg	41.6 bcd	9.6 e	142 fghi
Stoneville 1536 ...	1343 abcde	5.33 fg	39.1 fg	11.0 abcd	133 i
MD 82ne	1334 bcde	6.52 ab	42.4 ab	11.1 abc	140 ghi
PD 6992	1334 bcde	6.29 bc	39.6 fg	10.6 bcde	154 bcd
Stoneville 213	1324 bcde	5.85 cdef	40.7 de	10.3 cde	124 j
La 434-RKR	1296 cde	5.97 bcde	39.9 ef	11.2 abc	152 bcde
Coker 2901	1285 de	5.72 def	41.8 bc	10.5 bcde	150 bcdef
Stoneville 1173 ...	1228 e	6.90 a	39.2 fg	12.1 a	144 efgh
Acala SJ-5	544 f	6.43 ab	38.1 h	11.8 ab	159 ab

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Deltapine 90	1.12 cde	0.52 abcd	203 cde	6.9 def	4.48 bcde
Coker 310	1.17 a	.54 abcd	192 efgh	6.1 gh	4.52 abcde
PD 6044	1.15 ab	.56 ab	206 bcd	7.2 cd	4.25 def
PD 6186	1.16 a	.56 ab	225 a	7.6 bc	4.72 abc
Coker 80903	1.14 abc	.53 abcd	195 defg	6.2 gh	4.38 cdef
PD 6132	1.14 abcd	.56 a	216 ab	6.2 gh	4.50 abcde
NK 2019	1.15 abc	.54 abcd	186 ghi	6.4 efgh	4.85 ab
McNair 235	1.10 e	.50 d	192 efgh	6.2 gh	4.50 abcde
Stoneville 1084 ...	1.16 a	.54 abc	189 fghi	6.4 efgh	4.52 abcde
GaT 75-3712	1.16 a	.53 abcd	193 efgh	6.4 efg	4.58 abcd
Coker 81104	1.11 de	.52 cd	195 defg	5.8 h	4.88 a
Deltapine 712-227 .	1.12 cde	.52 bcd	198 cdefg	8.1 b	4.48 bcde
Stoneville 1536 ...	1.16 a	.54 abc	183 hi	7.0 de	4.72 abc
MD 82ne	1.12 bcde	.54 abc	196 cdefg	8.7 a	4.02 f
PD 6992	1.16 a	.54 abc	208 bc	7.3 cd	4.55 abcd
Stoneville 213	1.10 e	.52 bc	178 i	7.8 bc	4.80 ab
La 434-RKR	1.15 abc	.54 abcd	194 efgh	7.6 bc	4.15 ef
Coker 2901	1.12 bcde	.52 cd	196 cdefg	6.3 fgh	4.28 def
Stoneville 1173 ...	1.17 a	.56 a	188 fghi	7.0 de	4.75 abc
Acala SJ-5	1.15 abc	.54 abc	199 cdef	6.1 gh	4.28 def

Table 105. High Quality test: Combined High-Volume Instrument and Colorimeter data for Tifton, Ga.; Belle Mina, Ala.; Florence, S.C.; and Rocky Mount., N.C. by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Deltapine 90	1.18 cdef	84.2 abc	28.8 ab	79.4 ab	7.2 abcd
Coker 310	1.23 ab	82.8 c	27.0 abc	77.8 ab	7.3 abcd
PD 6044	1.18 cdef	84.2 abc	29.5 a	75.2 b	7.0 abcd
PD 6186	1.20 abcd	85.2 a	29.5 a	75.9 b	7.8 ab
Coker 80903	1.20 abc	82.8 c	27.5 abc	78.4 ab	7.4 abcd
PD 6132	1.18 cdef	84.0 abc	28.2 ab	78.2 ab	6.7 cd
NK 2019	1.18 cdef	83.2 bc	27.2 abc	79.2 ab	6.8 cd
McNair 235	1.13 g	83.5 bc	26.2 abc	78.8 ab	7.2 abcd
Stoneville 1084 ...	1.21 abc	84.0 abc	26.5 abc	78.9 ab	7.0 abcd
GaT 75-3712	1.20 abc	83.2 bc	27.5 abc	77.1 ab	6.8 bcd
Coker 81104	1.18 cdef	84.2 abc	27.0 abc	78.4 ab	7.6 abc
Deltapine 712-227 .	1.15 defg	84.0 abc	27.5 abc	78.5 ab	7.0 abcd
Stoneville 1536 ...	1.20 abc	83.2 bc	25.5 bc	80.6 ab	7.5 abc
MD 82ne	1.14 efg	84.2 abc	26.0 bc	76.8 ab	8.0 a
PD 6992	1.20 abc	83.8 abc	28.2 ab	77.5 ab	7.2 abcd
Stoneville 213	1.14 fg	83.8 abc	24.5 c	77.8 ab	7.2 abcd
La 434-RKR	1.19 bcde	82.8 c	28.0 ab	78.6 ab	6.6 cd
Coker 2901	1.18 cdef	83.5 bc	26.8 abc	77.5 ab	7.3 abcd
Stoneville 1173 ...	1.23 a	84.5 ab	27.8 abc	82.0 a	6.4 d
Acala SJ-5	1.19 abcd	84.8 ab	28.2 ab	77.2 ab	7.1 abcd

Table 106. High Quality test: Combined yield, boll, fiber and yarn tenacity data for St. Joseph, La.; Portageville, Mo.; Stoneville, Miss.; Jackson, Tenn.; College Station, Tex.; and Rohwer, Ark. by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 1084 ...	1079 a	5.13 gh	36.4 h	10.8 bc	153 def
Coker 310	1063 ab	5.67 bcdef	39.4 abcd	10.7 bc	155 def
Stoneville 213	1062 ab	5.50 cdefg	39.4 abcd	10.5 c	134 h
McNair 235	1062 ab	5.69 bcde	39.4 abcd	10.3 c	149 efg
Deltapine 712-227 .	1052 abc	4.86 hi	39.7 abc	9.5 d	148 fg
MD 82ne	1038 abc	5.74 bcde	40.5 a	11.1 b	145 g
Deltapine 90	1036 abcd	5.32 efg	40.4 a	9.7 d	152 defg
NK 2019	1035 abcd	5.86 bc	39.1 abcde	10.8 bc	145 g
GaT 75-3712	1024 abcd	5.44 cdefg	38.2 cdefg	11.2 b	149 efg
Stoneville 1536 ...	1010 abcd	4.84 hi	37.0 gh	10.8 bc	148 fg
Coker 81104	998 abcd	5.77 bcd	39.9 ab	11.0 bc	158 cd
Coker 80903	990 abcd	5.83 bc	38.8 bcde	11.2 b	156 cde
La 434-RKR	987 abcd	5.70 bcde	39.3 abcd	11.1 b	153 def
Stoneville 1173 ...	969 abcd	6.06 ab	37.8 efgh	11.7 a	149 efg
PD 6044	953 abcd	5.36 defg	38.4 bcdef	10.9 bc	163 bc
PD 6132	932 bcd	4.68 i	39.5 abcd	10.7 bc	169 ab
PD 6186	925 cd	5.26 fg	38.5 bcdef	10.7 bc	169 ab
Coker 2901	924 cd	5.57 cdef	38.1 defg	11.2 b	159 cd
PD 6992	903 d	5.74 bcde	37.0 fgh	10.6 bc	157 cd
Acala SJ-5	574 e	6.37 a	37.2 fgh	11.8 a	171 a

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 1084 ...	1.17 ab	0.56 abcd	211 bc	5.5 fg	4.66 bcd
Coker 310	1.17 abc	.56 abcd	200 de	5.5 fg	4.42 defg
Stoneville 213	1.11 gh	.54 f	186 f	6.2 de	4.93 ab
McNair 235	1.13 defg	.55 def	200 ef	5.5 fg	4.65 bcde
Deltapine 712-227 .	1.11 a	.54 ef	204 cd	6.9 b	4.70 bcd
MD 82ne	1.13 efgh	.56 abcde	205 cd	8.1 a	4.25 g
Deltapine 90	1.11 gh	.54 ef	208 cd	5.8 ef	4.77 abc
NK 2019	1.13 efgh	.54 f	193 ef	5.5 fg	5.01 a
GaT 75-3712	1.15 bcde	.56 abcde	204 cd	6.0 f	4.45 cdefg
Stoneville 1536 ...	1.18 h	.60 ab	202 cd	6.1 de	4.62 bcdef
Coker 81104	1.12 fgh	.55 bcdef	208 cd	5.5 fg	4.69 bcd
Coker 80903	1.14 cdef	.55 bcdef	206 cd	5.4 fg	4.31 fg
La 434-RKR	1.15 bcde	.55 cdef	205 cd	6.5 cd	4.32 efg
Stoneville 1173 ...	1.16 abc	.56 abcde	203 cd	6.0 e	5.04 a
PD 6044	1.14 cdef	.57 abc	218 b	6.0 e	4.52 cdefg
PD 6132	1.16 bcd	.58 a	228 a	5.5 fg	4.52 cdefg
PD 6186	1.16 abc	.57 ab	229 a	6.7 bc	4.53 cdefg
Coker 2901	1.15 cdef	.56 bcde	208 cd	5.4 g	4.41 defg
PD 6992	1.14 cdef	.55 cdef	212 bc	6.1 de	4.56 cdefg
Acala SJ-5	1.16 bcd	.57 abc	230 a	5.6 fg	4.28 g

Table 107. High Quality test: Combined High-Volume Instrument and Colorimeter data for St. Joseph, La.; Portageville, Mo.; Stoneville, Miss.; Jackson, Tenn.; College Station, Tex.; and Rohwer, Ark. by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Stoneville 1084 ...	1.20 ab	83.5 bcde	28.5 bc	72.0 bc	8.0 de
Coker 310	1.19 abc	83.8 bcde	26.0 de	72.4 abc	8.4 bcde
Stoneville 213	1.12 gh	83.0 e	24.1 f	74.0 ab	8.7 b
McNair 235	1.15 def	83.5 bcde	25.2 ef	71.8 bc	8.3 bcde
Deltapine 712-227 .	1.12 gh	83.4 cde	25.4 ef	72.9 abc	8.5 bc
MD 82ne	1.14 fgh	83.7 bcde	26.9 cde	71.6 bc	9.1 a
Deltapine 90	1.11 h	83.4 cde	27.1 cde	73.3 abc	8.3 bcde
NK 2019	1.16 cdef	83.1 de	25.8 def	74.2 ab	8.4 bcd
GaT 75-3712	1.17 bcde	84.0 abcde	25.4 ef	73.2 abc	8.5 bc
Stoneville 1536 ...	1.21 a	84.1 abcd	26.0 de	73.2 abc	8.3 bcde
Coker 81104	1.14 fgh	83.7 bcde	26.2 de	72.8 abc	6.7 b
Coker 80903	1.18 bcd	83.4 cde	26.0 de	71.3 c	8.4 bcd
La 434-RKR	1.18 bcde	83.3 cde	25.5 ef	74.6 a	8.1 cde
Stoneville 1173 ...	1.22 a	84.1 abcd	28.7 abc	73.6 abc	8.0 e
PD 6044	1.18 bcde	84.5 ab	27.5 bcd	72.6 abc	8.3 bcde
PD 6132	1.19 abc	84.8 a	28.7 abc	71.8 bc	8.3 bcde
PD 6186	1.19 abc	84.3 abc	30.4 a	71.2 c	8.6 b
Coker 2901	1.15 efg	83.1 de	25.9 def	72.3 abc	8.5 bc
PD 6992	1.19 abc	83.5 bcde	29.0 ab	73.8 abc	8.5 bc
Acala SJ-5	1.17 bcde	84.5 ab	29.2 ab	74.6 a	8.5 bc

Table 108. High Quality test: Yield, boll, and yarn tenacity data for Tifton, Ga.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 90	1738 a	5.15	42.5	NA	NA
PD 6186	1683 ab	5.30	41.2	NA	NA
Stoneville 1084 ...	1599 abc	5.35	37.8	NA	NA
La 434-RKR	1588 abc	5.85	39.4	NA	NA
PD 6044	1558 abcd	5.45	40.2	NA	NA
Stoneville 213	1549 abcd	6.00	40.2	NA	NA
Coker 310	1522 abcd	5.70	40.4	NA	NA
Deltapine 712-227 .	1520 abcd	5.80	40.3	NA	NA
Stoneville 1536 ...	1511 abcd	5.15	39.0	NA	NA
Coker 80903	1508 abcd	6.15	40.2	NA	NA
NK 2019	1479 abcd	6.25	40.6	NA	NA
McNair 235	1462 abcd	5.95	39.5	NA	NA
PD 6992	1457 abcd	6.40	38.4	NA	NA
Coker 81104	1427 abcd	5.45	42.1	NA	NA
GaT 75-3712	1424 abcd	5.75	38.5	NA	NA
PD 6132	1392 bcd	4.90	41.4	NA	NA
Coker 2901	1388 bcd	5.70	40.4	NA	NA
Stoneville 1173 ...	1329 cd	6.20	38.1	NA	NA
MD 82ne	1259 d	6.05	41.3	NA	NA
Acala SJ-5	581 e	5.55	37.2	NA	NA

NA, Data not available.

Table 109. High Quality test: Yield, boll, fiber and yarn tenacity data for St. Joseph, La.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
La 434-RKR	1616 a	5.37	44.5	10.4	142
Deltapine 90	1612 a	4.97	46.6	8.8	142
Coker 310	1557 ab	5.22	44.2	9.7	149
Deltapine 712-227 .	1528 abc	4.56	45.6	8.8	136
Stoneville 1084 ...	1508 abc	4.44	41.8	9.4	143
Stoneville 213	1505 abc	5.30	42.8	9.8	128
GaT 75-3712	1489 abc	5.08	41.6	10.6	150
Coker 80903	1477 abc	5.34	43.0	10.2	156
PD 6132	1452 abcd	4.23	43.0	9.8	157
PD 6186	1445 abcde	4.64	43.8	9.4	164
NK 2019	1444 abcde	5.34	42.4	10.1	156
MD 82ne	1424 bcde	5.46	43.2	10.6	142
Stoneville 1536 ...	1421 bcde	4.61	40.9	9.6	142
McNair 235	1412 bcde	5.08	42.4	9.3	151
Coker 81104	1402 bcde	5.28	44.4	9.7	152
Stoneville 1173 ...	1385 bcde	5.86	40.6	11.1	144
Coker 2901	1347 cde	5.34	42.4	10.2	159
PD 6044	1274 de	4.98	41.6	9.7	149
PD 6992	1262 e	5.24	41.0	9.8	151
Acala SJ-5	588 f	5.91	40.4	11.1	162

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
La 434-RKR	1.16	0.54	194	6.2	4.50
Deltapine 90	1.13	.56	209	5.6	5.40
Coker 310	1.18	.57	194	4.5	4.75
Deltapine 712-227 .	1.13	.56	208	6.6	5.10
Stoneville 1084 ...	1.20	.58	206	4.8	4.60
Stoneville 213	1.14	.56	182	5.6	5.25
GaT 75-3712	1.20	.59	199	6.2	4.25
Coker 80903	1.17	.56	214	5.4	4.35
PD 6132	1.16	.58	216	5.3	4.65
PD 6186	1.18	.58	216	6.6	4.60
NK 2019	1.16	.55	192	5.2	5.05
MD 82ne	1.15	.56	201	7.7	4.40
Stoneville 1536 ...	1.19	.58	196	5.8	4.75
McNair 235	1.16	.54	206	5.0	4.65
Coker 81104	1.10	.54	216	5.0	4.75
Stoneville 1173 ...	1.18	.56	200	6.0	4.95
Coker 2901	1.16	.56	208	5.0	4.50
PD 6044	1.12	.57	208	6.1	5.05
PD 6992	1.15	.56	214	6.4	4.70
Acala SJ-5	1.17	.56	222	5.2	4.45

Table 110. High Quality test: High-Volume Instrument, Colorimeter, and seed data for St. Joseph, La.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
La 434-RKR	1.18	84.0	22.0	76.0	7.8
Deltapine 90	1.11	84.5	26.0	75.8	8.0
Coker 310	1.16	83.5	24.0	75.5	7.5
Deltapine 712-227 .	1.13	84.0	24.0	74.8	8.1
Stoneville 1084 ...	1.16	83.0	26.5	74.2	7.8
Stoneville 213	1.10	83.0	21.0	74.0	8.4
GaT 75-3712	1.18	83.5	25.0	77.2	8.6
Coker 80903	1.18	84.5	24.0	73.2	8.4
PD 6132	1.18	86.0	25.5	73.2	7.7
PD 6186	1.16	84.5	27.0	72.2	8.2
NK 2019	1.15	84.0	23.0	74.0	8.5
MD 82ne	1.12	83.0	28.0	74.2	8.7
Stoneville 1536 ...	1.20	84.5	24.0	76.0	8.2
McNair 235	1.14	83.5	25.5	74.0	7.8
Coker 81104	1.08	84.0	25.5	75.5	8.4
Stoneville 1173 ...	1.18	84.0	28.0	75.0	7.6
Coker 2901	1.13	83.0	24.0	74.5	7.9
PD 6044	1.12	85.0	25.5	75.5	8.0
PD 6992	1.20	85.0	28.0	75.5	8.3
Acala SJ-5	1.15	84.5	27.5	77.2	8.2

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
La 434-RKR	21.8	2.93	1.49	5.5
Deltapine 90	21.4	2.94	1.49	6.5
Coker 310	20.8	2.97	1.44	5.5
Deltapine 712-227 .	20.2	2.90	1.46	5.5
Stoneville 1084 ...	20.1	2.84	1.54	4.5
Stoneville 213	18.4	3.11	1.46	5.0
GaT 75-3712	21.0	2.89	1.37	5.5
Coker 80903	21.4	3.04	1.30	5.0
PD 6132	22.2	3.00	1.46	6.0
PD 6186	22.0	2.92	1.52	5.5
NK 2019	21.0	2.98	1.68	5.5
MD 82ne	20.8	3.18	1.42	5.5
Stoneville 1536 ...	20.1	2.96	1.46	4.5
McNair 235	20.6	2.98	1.32	6.0
Coker 81104	19.4	3.16	1.32	5.5
Stoneville 1173 ...	21.2	2.99	1.40	5.5
Coker 2901	20.6	3.06	1.37	5.5
PD 6044	21.6	2.92	1.47	5.0
PD 6992	21.6	2.89	1.36	4.5
Acala SJ-5	21.3	3.23	1.06	5.0

Table 111. High Quality test: Yield, boll, fiber and yarn tenacity data for Florence, S.C.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310	1577 a	6.01	41.4	10.4	150
PD 6044	1500 ab	5.45	39.6	10.2	154
PD 6132	1477 abc	4.98	42.6	9.4	160
PD 6186	1460 abc	5.35	41.7	9.4	158
GaT 75-3712	1457 abc	5.98	40.0	11.0	145
Coker 80903	1444 abc	6.35	41.1	10.2	153
MD 82ne	1422 bcd	6.26	40.8	11.2	137
NK 2019	1416 bcde	5.94	40.6	10.4	138
Deltapine 712-227 .	1412 bcde	5.51	40.8	10.0	140
McNair 235	1399 bcde	5.79	40.4	9.4	137
Coker 2901	1371 bcdef	5.41	40.6	10.1	148
Coker 81104	1369 bcdef	6.17	41.1	10.7	139
Deltapine 90	1356 bcdef	5.40	40.1	9.4	146
PD 6992	1354 bcdef	5.99	39.4	9.4	152
La 434-RKR	1337 cdef	5.72	38.2	10.4	146
Stoneville 213	1291 def	5.68	39.8	9.6	122
Stoneville 1536 ...	1277 def	5.05	37.0	11.0	134
Stoneville 1084 ...	1269 ef	5.12	37.6	10.4	145
Stoneville 1173 ...	1249 f	6.36	37.9	12.4	144
Acala SJ-5	457 g	5.76	37.5	11.7	148

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Coker 310	1.16	0.54	195	5.8	4.50
PD 6044	1.15	.56	210	7.0	4.20
PD 6132	1.12	.55	218	6.2	4.30
PD 6186	1.14	.55	233	7.3	4.65
GaT 75-3712	1.14	.52	194	6.0	4.45
Coker 80903	1.14	.52	197	5.8	4.35
MD 82ne	1.12	.53	200	8.0	3.90
NK 2019	1.12	.52	197	6.4	4.60
Deltapine 712-227 .	1.12	.52	204	7.6	4.40
McNair 235	1.08	.50	200	6.1	4.35
Coker 2901	1.11	.53	201	6.2	3.85
Coker 81104	1.08	.50	202	5.7	4.75
Deltapine 90	1.11	.54	214	6.5	4.25
PD 6992	1.12	.52	217	7.0	4.50
La 434-RKR	1.14	.54	199	7.2	4.10
Stoneville 213	1.08	.50	188	7.6	4.60
Stoneville 1536 ...	1.16	.52	192	6.8	4.60
Stoneville 1084 ...	1.14	.52	195	5.9	4.25
Stoneville 1173 ...	1.16	.54	198	6.8	4.35
Acala SJ-5	1.13	.52	198	6.0	4.05

Table 112. High Quality test: High-Volume Instrument, Colorimeter, and seed data for Florence, S.C.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Coker 310	1.24	82.5	26.5	77.8	8.6
PD 6044	1.18	84.0	28.5	72.5	8.7
PD 6132	1.15	83.5	28.5	76.0	8.3
PD 6186	1.17	84.5	28.0	70.5	9.4
GaT 75-3712	1.17	82.5	27.5	77.5	8.2
Coker 80903	1.21	83.5	26.0	77.5	8.4
MD 82ne	1.14	84.0	25.0	74.8	9.4
NK 2019	1.16	82.5	28.0	80.0	8.4
Deltapine 712-227 .	1.14	84.0	25.5	78.5	8.5
McNair 235	1.12	83.5	25.0	77.2	8.4
Coker 2901	1.17	83.5	27.0	77.0	8.1
Coker 81104	1.14	84.0	26.5	77.2	8.6
Deltapine 90	1.16	83.5	28.0	80.0	8.4
PD 6992	1.16	83.5	26.5	75.8	8.5
La 434-RKR	1.16	82.5	27.0	80.0	8.4
Stoneville 213	1.12	83.5	24.5	78.5	9.1
Stoneville 1536 ...	1.19	82.0	26.5	77.8	8.8
Stoneville 1084 ...	1.20	84.0	27.0	78.8	8.3
Stoneville 1173 ...	1.21	83.0	29.0	80.2	8.3
Acala SJ-5	1.16	84.0	27.0	76.0	8.5

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Coker 310	20.2	3.26	1.45	3.0
PD 6044	20.6	3.20	1.34	3.0
PD 6132	21.2	3.18	1.43	4.0
PD 6186	20.6	3.16	1.49	3.0
GaT 75-3712	20.8	3.15	1.42	3.0
Coker 80903	20.6	3.14	1.36	2.0
MD 82ne	20.2	3.28	1.47	4.5
NK 2019	21.1	3.08	1.54	3.5
Deltapine 712-227 .	19.1	3.19	1.30	4.0
McNair 235	20.9	3.12	1.30	4.0
Coker 2901	19.9	3.14	1.45	2.5
Coker 81104	19.6	3.30	1.36	2.5
Deltapine 90	20.6	3.14	1.36	5.0
PD 6992	20.6	3.06	1.44	3.5
La 434-RKR	20.4	3.19	1.33	3.5
Stoneville 213	18.4	3.12	1.39	3.0
Stoneville 1536 ...	19.7	3.04	1.51	3.0
Stoneville 1084 ...	18.8	3.08	1.54	3.0
Stoneville 1173 ...	21.1	3.04	1.42	4.0
Acala SJ-5	19.8	3.26	1.08	3.5

Table 113. High Quality test: Yield, boll, fiber and yarn tenacity data for Belle Mina, Ala.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
PD 6044	1553 a	5.49	42.0	10.6	157
Deltapine 90	1522 a	5.82	41.6	10.4	152
MD 82ne	1515 a	7.44	43.2	11.7	142
Stoneville 1536 ...	1500 a	5.50	39.2	11.5	132
Stoneville 1084 ...	1480 a	5.86	38.4	12.2	146
Coker 310	1463 ab	6.12	41.6	11.0	152
PD 6186	1416 ab	5.30	42.0	10.6	160
NK 2019	1411 ab	6.83	41.6	11.3	140
Coker 80903	1406 ab	6.47	40.8	11.6	150
McNair 235	1404 ab	6.21	41.2	10.9	135
PD 6132	1397 ab	5.13	42.7	11.2	166
La 434-RKR	1397 ab	6.20	39.7	12.2	157
Coker 81104	1390 ab	6.44	42.7	11.6	148
GaT 75-3712	1384 ab	6.33	41.0	11.4	146
Stoneville 213	1375 ab	6.02	40.8	11.2	127
Stoneville 1173 ...	1350 ab	8.21	40.0	12.6	144
PD 6992	1317 ab	6.43	39.0	12.3	156
Deltapine 712-227 .	1310 ab	5.00	42.0	9.6	144
Coker 2901	1212 b	5.65	42.0	11.2	152
Acala SJ-5	662 c	7.50	37.1	12.7	170

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
PD 6044	1.16	0.56	202	7.4	4.30
Deltapine 90	1.12	.52	192	7.2	4.70
MD 82ne	1.12	.56	194	9.4	4.15
Stoneville 1536 ...	1.17	.56	174	7.0	4.85
Stoneville 1084 ...	1.18	.56	183	6.8	4.80
Coker 310	1.17	.54	190	6.4	4.55
PD 6186	1.19	.56	218	7.9	4.80
NK 2019	1.17	.56	176	6.4	5.10
Coker 80903	1.15	.53	193	6.5	4.40
McNair 235	1.12	.51	183	6.3	4.65
PD 6132	1.16	.57	214	6.2	4.70
La 434-RKR	1.16	.54	188	8.0	4.20
Coker 81104	1.14	.54	188	5.8	5.00
GaT 75-3712	1.17	.55	191	6.8	4.70
Stoneville 213	1.12	.54	168	8.0	5.00
Stoneville 1173 ...	1.18	.58	178	7.2	5.15
PD 6992	1.19	.56	198	7.6	4.60
Deltapine 712-227 .	1.12	.52	192	8.6	4.55
Coker 2901	1.13	.51	192	6.4	4.70
Acala SJ-5	1.16	.56	200	6.2	4.50

Table 114. High Quality test: High-Volume Instrument and Colorimeter data for Belle Mina, Ala.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
PD 6044	1.18	84.5	30.5	78.0	5.4
Deltapine 90	1.20	85.0	29.5	78.8	5.9
MD 82ne	1.16	84.5	27.0	78.8	6.5
Stoneville 1536 ...	1.22	84.5	24.5	83.5	6.2
Stoneville 1084 ...	1.23	84.0	26.0	79.0	5.8
Coker 310	1.22	83.0	27.5	77.8	6.0
PD 6186	1.22	86.0	31.0	81.2	6.3
NK 2019	1.21	84.0	26.5	78.5	5.2
Coker 80903	1.19	82.0	29.0	79.2	6.4
McNair 235	1.14	83.5	27.5	80.2	5.9
PD 6132	1.20	84.5	28.0	80.5	5.1
La 434-RKR	1.21	83.0	29.0	77.2	4.8
Coker 81104	1.20	84.5	27.5	79.5	6.5
GaT 75-3712	1.23	84.0	27.5	76.8	5.5
Stoneville 213	1.16	84.0	24.5	77.0	5.2
Stoneville 1173 ...	1.26	86.0	26.5	83.8	4.5
PD 6992	1.24	84.0	30.0	79.2	6.0
Deltapine 712-227 .	1.17	84.0	29.5	78.5	5.5
Coker 2901	1.18	83.5	26.5	78.0	6.5
Acala SJ-5	1.22	85.5	29.5	78.5	5.7

Table 115. High Quality test: Yield, boll and yarn tenacity data for Rocky Mount., N.C.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 90	1426 a	5.80	43.4	9.6	NA
Coker 310	1367 ab	6.48	44.2	9.8	NA
Coker 80903	1357 ab	6.61	44.4	10.2	NA
PD 6132	1353 ab	5.12	46.2	9.3	NA
NK 2019	1343 ab	6.71	43.2	10.4	NA
McNair 235	1336 abc	6.22	43.4	10.1	NA
Coker 81104	1309 abcd	6.02	46.0	10.0	NA
PD 6044	1266 bcd	5.72	44.5	9.8	NA
Stoneville 1084 ...	1259 bcd	5.60	40.6	10.6	NA
GaT 75-3712	1249 bcd	6.22	43.4	10.2	NA
PD 6186	1247 bcd	5.54	44.0	9.6	NA
PD 6992	1244 bcd	6.35	41.4	10.0	NA
Deltapine 712-227 .	1201 cd	5.90	43.3	9.3	NA
Stoneville 1536 ...	1191 d	5.61	41.0	10.6	NA
Coker 2901	1178 de	6.14	44.1	10.3	NA
MD 82ne	1175 de	6.34	44.4	10.4	NA
Stoneville 213	1174 de	5.72	42.0	10.0	NA
Stoneville 1173 ...	1059 ef	6.85	41.0	11.2	NA
La 434-RKR	994 f	6.12	42.5	11.0	NA
Acala SJ-5	528 g	6.90	40.6	11.0	NA

NA, Data not available.

Table 116. High Quality test: Yield, boll, fiber and yarn tenacity data for Portageville, Mo.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	1390 a	6.65	40.5	11.2	141
NK 2019	1297 ab	6.65	40.4	11.2	128
Coker 310	1274 ab	6.60	41.0	11.6	144
MD 82ne	1268 ab	6.65	42.0	12.2	132
Stoneville 1084 ...	1264 abc	5.70	37.2	12.0	148
PD 6992	1261 abc	6.55	38.0	10.8	148
Deltapine 90	1235 bcd	5.85	41.8	10.8	144
Coker 80903	1230 bcd	6.00	40.2	11.8	142
Stoneville 1173 ...	1187 bcde	6.80	39.9	12.2	145
La 434-RKR	1187 bcde	6.65	39.6	12.8	147
Coker 81104	1185 bcde	5.95	41.8	11.6	144
Deltapine 712-227 .	1182 bcde	5.50	39.6	10.2	140
Stoneville 213	1180 bcde	5.95	39.2	11.6	130
Stoneville 1536 ...	1128 cde	5.30	37.8	12.6	140
Coker 2901	1113 def	6.25	40.6	11.6	146
PD 6044	1110 def	5.90	40.4	11.8	158
PD 6132	1105 def	4.85	42.2	11.2	156
GaT 75-3712	1070 ef	5.40	39.7	11.6	139
PD 6186	988 f	5.75	39.2	12.0	156
Acala SJ-5	847 g	7.35	38.0	12.2	168

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
McNair 235	1.10	0.52	194	6.0	5.15
NK 2019	1.10	.52	190	6.2	5.45
Coker 310	1.13	.54	200	6.2	5.20
MD 82ne	1.10	.54	202	8.8	4.75
Stoneville 1084 ...	1.15	.56	212	6.1	5.45
PD 6992	1.10	.52	212	6.6	5.10
Deltapine 90	1.08	.52	210	6.6	5.30
Coker 80903	1.11	.53	208	5.9	4.90
Stoneville 1173 ...	1.14	.54	204	6.8	5.55
La 434-RKR	1.13	.54	204	7.4	4.70
Coker 81104	1.08	.53	200	6.0	5.40
Deltapine 712-227 .	1.07	.52	204	8.0	5.00
Stoneville 213	1.08	.52	185	7.2	5.10
Stoneville 1536 ...	1.16	.56	200	7.0	5.40
Coker 2901	1.11	.54	204	5.8	5.15
PD 6044	1.12	.56	214	6.8	5.10
PD 6132	1.14	.57	231	6.4	5.05
GaT 75-3712	1.11	.52	202	6.5	5.20
PD 6186	1.16	.56	224	7.6	5.10
Acala SJ-5	1.14	.57	228	6.6	4.65

Table 117. High Quality test: High-Volume Instrument and Colorimeter data for Portageville, Mo.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
McNair 235	1.14	83.0	27.0	68.8	8.4
NK 2019	1.14	83.0	28.0	71.8	8.1
Coker 310	1.18	83.5	27.0	67.5	8.9
MD 82ne	1.13	82.5	29.5	70.5	9.0
Stoneville 1084 ...	1.21	83.5	30.0	69.5	8.3
PD 6992	1.15	82.5	29.5	71.2	8.5
Deltapine 90	1.10	82.5	29.0	71.5	8.5
Coker 80903	1.16	83.0	27.5	69.8	8.6
Stoneville 1173 ...	1.22	84.0	30.0	70.0	7.8
La 434-RKR	1.16	82.0	29.5	70.2	8.1
Coker 81104	1.11	83.5	27.0	70.0	8.6
Deltapine 712-227 .	1.12	83.0	28.0	67.8	8.6
Stoneville 213	1.12	82.5	25.5	71.8	8.8
Stoneville 1536 ...	1.20	84.0	28.0	70.5	8.1
Coker 2901	1.15	82.5	29.5	70.0	9.2
PD 6044	1.18	84.5	29.0	72.7	8.5
PD 6132	1.18	84.0	30.5	70.8	8.1
GaT 75-3712	1.14	83.0	26.5	70.5	8.3
PD 6186	1.18	82.5	33.0	69.5	8.8
Acala SJ-5	1.15	84.0	32.5	72.8	8.3

Table 118. High Quality test: Yield, boll, fiber and yarn tenacity data for College Station, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
MD 82ne	1203 a	4.16	37.0	10.2	155
McNair 235	1099 ab	4.68	36.0	10.0	154
GaT 75-3712	1095 ab	4.54	33.8	10.4	158
PD 6132	1067 abc	3.98	33.8	9.9	176
Stoneville 1173 ...	1006 abcd	4.93	34.5	10.5	158
Stoneville 213	967 abcd	4.65	36.5	9.5	142
NK 2019	963 abcd	4.82	36.5	10.2	147
Coker 310	960 abcd	4.73	34.4	10.0	166
La 434-RKR	946 bcd	4.47	34.7	9.6	166
Deltapine 90	934 bcd	3.92	35.3	8.4	156
Coker 81104	932 bcd	4.76	34.7	10.8	167
Deltapine 712-227 .	888 bcd	4.01	35.4	8.4	158
PD 6992	882 bcd	5.13	33.2	9.8	156
Stoneville 1084 ...	877 bcd	4.13	32.0	9.6	167
Stoneville 1536 ...	867 bcd	3.72	33.0	9.0	166
PD 6044	834 cd	4.33	33.8	10.3	172
PD 6186	815 cd	3.91	32.7	9.7	182
Coker 80903	810 cd	4.76	33.6	10.3	168
Coker 2901	749 de	4.35	32.0	10.1	166
Acala SJ-5	563 e	5.40	34.1	12.0	188

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
MD 82ne	1.08	0.54	224	8.4	3.75
McNair 235	1.08	.55	209	5.2	4.20
GaT 75-3712	1.08	.54	216	5.8	3.95
PD 6132	1.10	.55	244	5.2	4.00
Stoneville 1173 ...	1.11	.54	218	5.4	4.65
Stoneville 213	1.06	.53	197	5.8	4.50
NK 2019	1.05	.50	208	5.2	4.80
Coker 310	1.10	.56	202	5.4	3.70
La 434-RKR	1.09	.53	224	6.0	3.65
Deltapine 90	1.06	.52	213	5.2	3.95
Coker 81104	1.08	.55	221	5.8	4.35
Deltapine 712-227 .	1.06	.54	206	6.2	4.35
PD 6992	1.10	.53	216	5.8	4.05
Stoneville 1084 ...	1.12	.54	227	5.4	3.80
Stoneville 1536 ...	1.15	.55	223	6.0	3.40
PD 6044	1.10	.54	243	5.5	3.55
PD 6186	1.08	.54	249	6.3	3.60
Coker 80903	1.10	.54	200	5.4	3.40
Coker 2901	1.08	.54	218	5.2	3.60
Acala SJ-5	1.13	.57	270	4.5	4.05

Table 119. High Quality test: High-Volume Instrument amd Colorimeter data for College Station, Tex.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
MD 82ne	1.10	83.5	27.0	67.0	10.0
McNair 235	1.10	83.5	25.0	69.0	8.6
GaT 75-3712	1.10	84.5	25.5	68.0	9.0
PD 6132	1.10	84.0	32.0	68.0	9.0
Stoneville 1173 ...	1.17	84.0	30.0	67.0	8.6
Stoneville 213	1.05	83.5	26.5	70.0	8.8
NK 2019	1.08	82.5	27.5	71.2	9.0
Coker 310	1.14	85.0	27.0	68.2	8.9
La 434-RKR	1.11	83.5	25.5	71.0	8.5
Deltapine 90	1.02	83.0	27.0	68.0	8.4
Coker 81104	1.05	84.5	26.5	69.2	9.4
Deltapine 712-227 .	1.04	83.0	25.0	71.0	9.0
PD 6992	1.13	83.0	30.5	70.5	8.6
Stoneville 1084 ...	1.16	84.0	30.5	68.2	7.7
Stoneville 1536 ...	1.16	84.0	29.0	67.5	8.5
PD 6044	1.12	84.0	28.5	69.0	8.5
PD 6186	1.10	84.5	30.5	70.5	8.6
Coker 80903	1.12	82.5	26.5	61.8	8.1
Coker 2901	1.06	83.0	27.5	67.0	8.9
Acala SJ-5	1.14	85.0	31.0	68.5	8.4

Table 120. High Quality test: Yield, boll, fiber and yarn tenacity data for Stoneville, Miss.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
GaT 75-3712	1175 a	6.12	38.0	10.9	150
Deltapine 712-227 .	1156 ab	5.08	39.8	9.0	136
NK 2019	1097 abc	6.18	37.4	11.0	156
Deltapine 90	1096 abc	5.69	38.5	9.6	142
MD 82ne	1092 abc	6.18	39.8	11.1	142
Stoneville 213	1085 abc	5.43	40.6	9.8	128
Stoneville 1536 ...	1053 abcd	5.05	37.0	10.4	142
Stoneville 1084 ...	1027 abcd	5.72	35.9	11.0	143
McNair 235	1015 abcd	6.02	38.2	10.0	151
Coker 310	1014 abcd	5.79	38.8	10.4	149
La 434-RKR	1014 abcd	5.87	39.0	10.9	142
Coker 81104	979 abcd	5.97	39.2	10.8	152
Stoneville 1173 ...	970 abcd	6.47	37.2	11.6	144
Coker 2901	959 bcd	5.78	36.5	11.6	159
PD 6044	939 cd	5.59	37.4	11.4	149
Coker 80903	929 cd	6.41	37.2	11.4	156
PD 6186	920 cd	5.54	38.4	11.0	164
PD 6992	847 de	5.89	36.0	11.0	151
PD 6132	715 e	4.67	38.8	11.2	157
Acala SJ-5	408 f	5.79	36.0	11.0	162

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
GaT 75-3712	1.20	0.56	200	5.8	4.20
Deltapine 712-227 .	1.14	.53	197	6.7	4.35
NK 2019	1.18	.54	183	5.4	4.75
Deltapine 90	1.15	.54	203	5.4	4.25
MD 82ne	1.16	.58	193	7.4	4.10
Stoneville 213	1.12	.52	182	6.4	4.80
Stoneville 1536 ...	1.20	.56	191	5.7	4.55
Stoneville 1084 ...	1.20	.55	200	5.3	4.75
McNair 235	1.17	.55	196	5.8	4.45
Coker 310	1.21	.54	196	5.8	4.00
La 434-RKR	1.18	.54	200	6.3	4.30
Coker 81104	1.14	.53	208	5.2	4.40
Stoneville 1173 ...	1.18	.57	194	5.6	4.75
Coker 2901	1.21	.56	209	5.5	4.15
PD 6044	1.19	.57	210	5.5	4.35
Coker 80903	1.21	.55	198	5.3	3.90
PD 6186	1.18	.56	230	6.3	4.50
PD 6992	1.19	.53	209	5.8	4.35
PD 6132	1.20	.58	232	4.8	4.30
Acala SJ-5	1.18	.55	225	5.8	3.85

Table 121. High Quality test: High-Volume Instrument and Colorimeter data for Stoneville, Miss.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
GaT 75-3712	1.21	83.5	25.0	77.2	8.6
Deltapine 712-227 .	1.14	84.0	24.0	74.8	8.1
NK 2019	1.22	84.0	23.0	74.0	8.5
Deltapine 90	1.16	84.5	26.0	75.8	8.0
MD 82ne	1.18	83.0	28.0	74.2	8.7
Stoneville 213	1.14	83.0	21.0	74.0	8.4
Stoneville 1536 ...	1.22	84.5	24.0	76.0	8.2
Stoneville 1084 ...	1.24	83.0	26.5	74.2	7.8
McNair 235	1.18	83.5	25.5	74.0	7.8
Coker 310	1.22	83.5	24.0	75.5	7.5
La 434-RKR	1.21	84.0	22.0	76.0	7.8
Coker 81104	1.18	84.0	25.5	75.5	8.4
Stoneville 1173 ...	1.24	84.0	28.0	75.0	7.6
Coker 2901	1.23	83.0	24.0	74.5	7.9
PD 6044	1.22	85.0	25.5	75.5	8.0
Coker 80903	1.26	84.5	24.0	73.2	8.4
PD 6186	1.23	84.5	27.0	72.2	8.2
PD 6992	1.24	85.0	28.0	75.5	8.3
PD 6132	1.24	86.0	25.5	73.2	7.7
Acala SJ-5	1.20	84.5	27.5	77.2	8.2

Table 122. High Quality test: Yield, boll, fiber and yarn tenacity data for Jackson, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 1084 ...	1099 a	5.67	35.2	12.1	156
Stoneville 213	1058 ab	6.15	38.0	11.7	140
Coker 80903	1024 abc	6.62	40.0	12.1	154
Coker 310	1020 abcd	6.02	38.5	11.7	160
Stoneville 1536 ...	987 abcde	5.54	36.0	12.6	151
Coker 81104	984 abcde	6.88	39.2	12.0	166
Deltapine 712-227 .	975 abcde	5.15	37.9	10.9	157
NK 2019	973 abcde	6.28	38.6	11.4	152
PD 6044	964 abcde	6.01	38.9	11.2	168
McNair 235	948 abcde	6.04	39.8	11.2	146
PD 6186	914 bcde	6.46	38.2	11.6	174
Coker 2901	904 bcde	6.12	38.9	12.2	162
GaT 75-3712	879 cde	6.08	38.0	12.4	150
Deltapine 90	873 cde	6.15	39.9	11.0	162
PD 6132	872 cde	5.65	39.8	11.4	178
MD 82ne	855 cdef	6.24	40.4	11.6	148
Stoneville 1173 ...	847 cdef	6.24	36.4	13.2	152
La 434-RKR	837 ef	6.17	38.6	12.0	158
PD 6992	832 ef	5.88	37.0	11.6	169
Acala SJ-5	697 f	7.42	37.6	12.6	178

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Stoneville 1084 ...	1.20	0.59	208	5.6	4.70
Stoneville 213	1.14	.56	184	6.0	5.00
Coker 80903	1.14	.59	211	5.2	5.00
Coker 310	1.20	.60	208	5.6	4.45
Stoneville 1536 ...	1.22	.60	200	6.0	5.00
Coker 81104	1.21	.62	196	5.4	4.55
Deltapine 712-227 .	1.14	.58	206	7.2	4.70
NK 2019	1.16	.58	192	5.4	5.00
PD 6044	1.20	.60	217	6.0	4.55
McNair 235	1.16	.56	195	5.6	4.80
PD 6186	1.21	.62	226	6.6	4.85
Coker 2901	1.16	.58	198	5.3	4.65
GaT 75-3712	1.17	.58	203	5.8	4.65
Deltapine 90	1.15	.58	203	6.2	4.95
PD 6132	1.18	.61	216	5.7	4.60
MD 82ne	1.15	.56	203	8.4	4.25
Stoneville 1173 ...	1.20	.58	202	6.1	5.30
La 434-RKR	1.20	.60	201	6.5	4.45
PD 6992	1.18	.60	209	6.0	4.60
Acala SJ-5	1.16	.58	208	5.6	4.40

Table 123. High Quality test: High-Volume Instrument and Colorimeter data for Jackson, Tenn.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Stoneville 1084 ...	1.24	84.0	27.0	75.5	8.4
Stoneville 213	1.20	84.5	25.0	78.0	9.0
Coker 80903	1.18	84.5	27.0	75.2	9.1
Coker 310	1.26	84.0	28.5	75.2	8.6
Stoneville 1536 ...	1.28	85.5	25.0	76.8	8.6
Coker 81104	1.25	84.0	27.0	76.0	8.6
Deltapine 712-227 .	1.18	84.5	26.5	75.8	8.9
NK 2019	1.21	83.0	25.5	75.5	8.8
PD 6044	1.24	84.5	28.5	76.5	8.6
McNair 235	1.21	84.5	24.0	75.5	9.1
PD 6186	1.28	84.5	34.5	72.8	9.0
Coker 2901	1.18	83.5	25.0	75.8	8.8
GaT 75-3712	1.24	85.0	26.0	76.5	8.5
Deltapine 90	1.18	84.5	28.5	74.5	8.4
PD 6132	1.22	85.0	30.0	75.5	8.8
MD 82ne	1.18	85.5	25.5	73.8	9.2
Stoneville 1173 ...	1.28	85.5	29.0	78.0	8.4
La 434-RKR	1.22	85.0	25.5	76.0	8.2
PD 6992	1.24	84.5	29.5	76.8	8.7
Acala SJ-5	1.21	85.0	30.0	77.0	8.4

Table 124. High Quality test: Yield, boll and yarn tenacity data for Rohwer, Ark.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 1084 ...	739 a	NA	NA	NA	NA
McNair 235	717 ab	NA	NA	NA	NA
Deltapine 712-227 .	667 abc	NA	NA	NA	NA
Deltapine 90	665 abc	NA	NA	NA	NA
Coker 310	659 abcd	NA	NA	NA	NA
Stoneville 1536 ...	649 abcd	NA	NA	NA	NA
PD 6044	631 abcde	NA	NA	NA	NA
MD 82ne	612 abcde	NA	NA	NA	NA
Stoneville 213	606 abcde	NA	NA	NA	NA
Stoneville 1173 ...	598 abcde	NA	NA	NA	NA
Coker 81104	573 bcde	NA	NA	NA	NA
GaT 75-3712	557 cde	NA	NA	NA	NA
NK 2019	549 cde	NA	NA	NA	NA
PD 6132	537 cde	NA	NA	NA	NA
Coker 2901	533 cde	NA	NA	NA	NA
La 434-RKR	517 cde	NA	NA	NA	NA
PD 6992	511 de	NA	NA	NA	NA
Coker 80903	511 de	NA	NA	NA	NA
PD 6186	494 e	NA	NA	NA	NA
Acala SJ-5	324 f	NA	NA	NA	NA

NA, Data not available.

Table 125. Pima test: Yield, boll, fiber, and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-59	1255 a	3.67 a	40.8 a	12.0 bc	203 cde
P-34	1205 ab	3.36 c	40.7 a	12.4 a	204 cde
P-53	1178 abc	3.19 de	38.1 def	12.2 ab	213 a
E-15	1172 abc	3.50 b	38.9 c	11.5 d	202 def
P-45	1165 abc	3.11 de	38.2 def	11.0 e	210 ab
P-61	1159 abc	3.62 ab	38.8 cd	11.8 cd	196 g
P-60	1108 bcd	3.63 ab	38.8 cd	11.9 bcd	209 ab
P-57	1096 cde	3.05 e	37.8 f	11.0 e	198 fg
P-52	1035 de	3.24 cd	38.6 cde	11.2 e	207 bc
Pima S-5	1003 ef	3.66 a	39.6 b	11.9 bcd	194 g
P-51	1001 ef	3.33 c	38.0 ef	11.8 cd	206 bcd
P-58	914 f	3.05 e	36.8 g	11.8 cd	201 ef

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-59	1.41 bcd	0.74 a	281 cde	7.2 ab	4.71 a
P-34	1.37 e	.72 ab	290 abcd	7.1 ab	4.58 ab
P-53	1.40 bcd	.74 a	297 ab	7.0 ab	4.17 d
E-15	1.37 e	.69 c	272 e	6.9 b	4.18 d
P-45	1.41 abc	.73 ab	302 a	7.1 ab	4.64 a
P-61	1.41 bcd	.72 abc	278 de	7.1 ab	4.42 bc
P-60	1.39 cde	.72 ab	293 abc	7.0 ab	4.61 a
P-57	1.39 cde	.72 ab	288 bcd	6.9 b	4.39 c
P-52	1.42 ab	.74 a	300 a	6.4 c	4.61 a
Pima S-5	1.38 de	.72 abc	281 cde	7.3 a	4.28 cd
P-51	1.39 cde	.72 abc	288 bcd	7.2 ab	4.65 a
P-58	1.44 a	.72 abc	288 bcd	6.4 c	4.17 d

Table 126. Pima test: High-Volume Instrument, Colorimeter, and seed data by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-59	1.31 ab	86.1 a	35.6 bc	68.3 b	10.1 d
P-34	1.44 a	65.1 a	37.6 abc	63.2 de	11.7 a
P-53	1.42 ab	86.5 a	34.7 cd	64.4 cde	11.0 b
E-15	1.34 ab	84.6 ab	35.8 bc	64.8 cde	10.8 bc
P-45	1.30 b	85.4 a	40.0 a	66.0 bcd	10.7 cd
P-61	1.40 ab	84.8 b	38.1 ab	62.5 e	10.2 cd
P-60	1.37 ab	85.7 a	40.0 a	67.4 bc	10.9 b
P-57	1.34 ab	86.0 a	37.6 abc	71.4 a	9.2 e
P-52	1.32 ab	86.1 a	38.3 ab	64.2 cde	10.8 bc
Pima S-5	1.41 ab	85.7 a	32.3 d	66.4 bcd	11.2 ab
P-51	1.38 ab	85.7 a	38.0 ab	64.4 cde	11.2 ab
P-58	1.33 ab	83.2 b	36.9 abc	66.8 bc	11.1 ab

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
P-59	22.4 f	3.48 a	1.29 de	1.2 cd
P-34	23.4 bcd	3.46 ab	1.21 ef	1.3 a
P-53	22.8 ef	3.51 a	1.44 b	1.2 cd
E-15	24.0 a	3.52 a	1.42 bc	1.2 b
P-45	23.2 cde	3.33 cd	1.38 bcd	1.2 cd
P-61	23.7 abc	3.50 a	1.30 d	1.2 b
P-60	23.5 abcd	3.53 a	1.15 f	1.2 bc
P-57	21.2 g	3.33 cd	1.34 cd	1.2 de
P-52	23.1 de	3.23 d	1.54 a	1.2 bc
Pima S-5	23.9 ab	3.51 a	1.18 f	1.2 b
P-51	23.2 cde	3.36 bc	1.37 bcd	1.2 e
P-58	22.5 f	3.30 cd	1.36 bcd	1.3 a

Table 127. Pima test: Yield, boll, fiber, and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Safford, Ariz. (Curtis farm)	1239 a	3.35 cd	40.2 a	10.7 c	202 bc
Wenden, Ariz.	1158 b	3.58 ab	38.9 b	12.5 a	203 b
Safford, Ariz. (Layton farm)	1143 b	3.50 bc	40.3 a	11.5 b	203 b
Phoenix, Ariz.	1127 b	2.87 e	36.5 d	11.4 b	206 a
Salome, Ariz.	1047 c	3.25 d	38.7 bc	11.6 b	200 c
Marana, Ariz. (Clark farm)	960 d	3.65 a	37.9 c	12.4 a	207 a

Location	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
Safford, Ariz. (Curtis farm)	1.38 b	0.71 a	282 cd	7.0 a	4.26 c
Wenden, Ariz.	1.40 ab	.73 a	292 b	7.1 a	4.42 abc
Safford, Ariz. (Layton farm)	1.39 b	.73 a	284 cd	7.2 a	4.51 ab
Phoenix, Ariz.	1.38 b	.73 a	303 a	6.4 b	4.55 a
Salome, Ariz.	1.40 ab	.71 a	280 d	7.2 a	4.33 bc
Marana, Ariz. (Clark farm)	1.43 a	.74 a	288 bc	6.9 a	4.60 a

Table 128. Pima test: High-Volume Instrument, Colorimeter, and seed data by test location

Location	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
Safford, Ariz. (Curtis farm)	1.38 a	84.7 bc	36.5 ab	66.1 ab	11.1 a
Wenden, Ariz.	1.36 a	85.8 ab	36.8 ab	63.5 b	10.5 c
Safford, Ariz. (Layton farm)	1.38 a	86.2 a	39.3 a	65.9 ab	10.9 abc
Phoenix, Ariz.	1.39 a	85.4 abc	38.4 ab	67.0 a	10.5 bc
Salome, Ariz.	1.33 a	84.3 c	35.5 b	67.1 a	10.5 c
Marana, Ariz. (Clark farm)	1.34 a	86.4 a	35.5 b	65.2 ab	11.0 ab

Location	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
Safford, Ariz. (Curtis farm)	23.8 ab	3.25 bc	1.42 ab	12.5 a
Wenden, Ariz.	22.4 bc	3.72 a	1.34 ab	12.1 b
Safford, Ariz. (Layton farm)	24.4 a	3.01 c	1.45 a	12.4 a
Phoenix, Ariz.	21.9 c	3.55 a	1.06 c	11.9 b
Salome, Ariz.	22.5 bc	3.53 a	1.38 ab	12.1 b
Marana, Ariz. (Clark farm)	23.4 abc	3.48 ab	1.33 b	12.1 b

Table 129. Pima test: Combined yield, boll, fiber and yarn tenacity data for Safford (Curtis and Layton farms), Ariz. by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	1302 a	3.50 ab	42.4 a	12.0 a	199 bcd
P-59	1288 ab	3.73 a	42.4 a	11.2 cd	202 bcd
P-45	1251 ab	3.23 cd	39.8 c	10.5 ef	209 ab
P-61	1234 ab	3.56 ab	40.6 b	11.0 cde	196 cd
E-15	1229 ab	3.42 bc	40.8 b	10.6 def	201 bcd
P-57	1203 abc	3.04 d	39.9 c	10.1 f	192 d
P-53	1162 abc	3.24 cd	39.3 c	11.9 ab	214 a
P-52	1153 abc	3.34 bc	39.6 c	10.6 def	205 abc
P-51	1145 bc	3.50 ab	39.3 c	11.2 cd	206 abc
P-60	1140 bc	3.58 ab	39.9 c	11.1 cd	208 ab
Pima S-5	1069 c	3.74 a	41.2 b	11.4 bc	194 cd
P-58	1065 c	3.20 cd	37.8 d	11.4 bc	203 abc

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-34	1.34 f	0.73 bcd	283 ab	7.0 abcd	4.55 a
P-59	1.41 b	.74 ab	280 ab	7.4 abc	4.62 a
P-45	1.40 bc	.73 abc	296 a	7.3 abc	4.50 ab
P-61	1.38 bcd	.70 de	278 ab	7.0 abcd	4.35 abc
E-15	1.35 ef	.68 e	269 b	6.8 bcd	4.15 bc
P-57	1.38 cde	.72 bcd	283 ab	7.0 abcd	4.45 ab
P-53	1.40 bc	.76 a	296 a	7.2 abc	4.02 c
P-52	1.38 bcd	.72 bcd	292 ab	6.7 cd	4.75 a
P-51	1.40 bc	.72 bcd	282 ab	7.6 a	4.58 a
P-60	1.36 def	.70 cde	284 ab	7.0 abcd	4.40 abc
Pima S-5	1.39 bcd	.72 bcd	271 b	7.5 ab	4.12 bc
P-58	1.44 a	.73 bcd	282 ab	6.4 d	4.12 bc

Table 130. Pima test: Combined High-Volume Instrument, Colorimeter, and seed data for Safford (Curtis and Layton farms), Ariz. by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-34	1.38 ab	85.2 a	38.2 ab	62.4 d	11.6 a
P-59	1.35 ab	85.5 a	37.5 ab	69.8 ab	10.3 c
P-45	1.30 ab	85.0 a	40.8 a	65.4 cd	10.8 b
P-61	1.46 a	85.0 a	38.2 ab	64.4 cd	11.4 ab
E-15	1.36 ab	85.0 a	37.5 ab	65.6 bcd	11.2 ab
P-57	1.24 b	84.8 a	39.8 a	70.8 a	9.6 d
P-53	1.43 a	86.5 a	35.2 ab	66.2 bcd	11.2 ab
P-52	1.35 ab	86.8 a	39.2 ab	63.1 cd	11.2 ab
P-51	1.40 a	85.5 a	39.5 a	66.0 bcd	11.3 ab
P-60	1.44 a	86.0 a	39.8 a	65.8 bcd	10.9 b
Pima S-5	1.46 a	86.2 a	32.8 b	65.9 bcd	11.2 ab
P-58	1.39 ab	83.8 a	36.8 ab	66.6 bc	11.0 b

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
P-34	24.0 cde	3.20 abc	1.30 ef	13.0 a
P-59	23.3 e	3.18 abcd	1.36 cdef	12.0 c
P-45	24.0 cde	3.08 de	1.52 bcd	12.0 c
P-61	25.2 a	3.14 bcd	1.32 def	13.0 a
E-15	24.8 ab	3.13 bcd	1.48 bcde	13.0 a
P-57	22.4 f	2.98 ef	1.43 bcdef	12.0 c
P-53	23.9 de	3.26 a	1.57 ab	12.0 c
P-52	24.3 bcd	2.93 f	1.73 a	12.5 b
P-51	24.2 bcd	3.14 bcd	1.54 abc	12.0 c
P-60	24.7 abc	3.22 ab	1.25 f	12.5 b
Pima S-5	24.8 ab	3.20 abc	1.25 f	13.0 a
P-58	24.2 bcd	3.11 cd	1.48 bcde	13.0 a

Table 131. Pima test: Combined yield, boll, fiber and yarn tenacity data for Phoenix, Marana (Clark farm), Salome and Wenden, Ariz. by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-59	1238 a	3.64 a	40.0 a	12.3 ab	204 cdef
P-53	1187 ab	3.16 bc	37.5 c	12.4 ab	212 a
P-34	1157 abc	3.28 b	39.9 a	12.6 a	206 bcde
E-15	1143 abc	3.54 a	38.0 bc	12.0 b	203 def
P-45	1122 abc	3.05 cd	37.5 cd	11.2 c	211 ab
P-61	1121 abc	3.65 a	37.8 c	12.2 ab	197 gh
P-60	1092 bcd	3.65 a	38.2 bc	12.2 ab	209 ab
P-57	1043 cde	3.06 cd	36.7 de	11.4 c	201 efg
P-52	976 de	3.19 bc	38.2 bc	11.4 c	208 abc
Pima S-5	970 de	3.62 a	38.8 b	12.2 ab	194 h
P-51	929 ef	3.24 b	37.3 cd	12.1 b	207 bcd
P-58	839 f	2.97 d	36.2 e	11.9 b	200 fg

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-59	1.41 abc	0.74 ab	281 bcd	7.1 a	4.75 a
P-53	1.40 bc	.73 abc	298 ab	6.9 a	4.16 d
P-34	1.38 c	.72 abc	294 abc	7.1 a	4.60 ab
E-15	1.38 c	.70 c	274 d	7.0 a	4.20 d
P-45	1.42 ab	.73 abc	304 a	6.9 a	4.71 a
P-61	1.42 ab	.72 abc	279 cd	7.1 a	4.45 bc
P-60	1.41 abc	.73 abc	298 ab	7.0 a	4.71 a
P-57	1.40 bc	.73 abc	290 abcd	6.9 a	4.36 cd
P-52	1.44 a	.76 a	305 a	6.3 b	4.54 abc
Pima S-5	1.38 c	.71 bc	287 bcd	7.2 a	4.35 cd
P-51	1.39 c	.72 abc	291 abc	7.0 a	4.69 a
P-58	1.43 a	.72 bc	290 abcd	6.4 b	4.19 d

Table 132. Pima test: Combined High-Volume Instrument, Colorimeter, and seed data for Phoenix, Marana (Clark farm), Salome and Wenden, Ariz. by cotton variety

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-59	1.29 a	86.4 a	34.6 bc	67.4 ab	10.0 cd
P-53	1.41 a	86.5 a	34.4 bc	63.5 bc	11.0 ab
P-34	1.47 a	86.5 a	37.2 ab	63.6 bc	11.8 a
E-15	1.33 a	84.4 ab	35.0 bc	64.4 bc	10.6 bc
P-45	1.31 a	85.6 a	39.8 a	66.2 bc	10.6 bc
P-61	1.37 a	84.6 ab	38.0 ab	61.6 c	9.6 de
P-60	1.34 a	85.5 a	39.5 a	68.2 ab	10.9 ab
P-57	1.38 a	86.6 a	36.5 ab	71.7 a	9.0 e
P-52	1.30 a	85.8 a	37.9 ab	64.8 bc	10.6 bc
Pima S-5	1.39 a	85.4 a	32.0 c	66.7 b	11.1 ab
P-51	1.37 a	85.8 a	37.2 ab	63.6 bc	11.2 ab
P-58	1.30 a	82.9 b	37.0 ab	66.8 b	11.2 ab

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
P-59	21.9 ef	3.63 ab	1.26 cd	11.9 cd
P-53	22.3 def	3.64 ab	1.37 abc	11.9 cd
P-34	23.1 abc	3.58 abc	1.16 de	13.0 a
E-15	23.6 a	3.72 a	1.38 ab	12.0 bc
P-45	22.9 bcd	3.46 cd	1.31 bc	11.9 cd
P-61	23.0 abc	3.67 a	1.30 bc	12.2 b
P-60	22.9 bcd	3.69 a	1.10 e	12.0 bc
P-57	20.6 g	3.50 bcd	1.29 bc	11.6 d
P-52	22.5 cde	3.39 d	1.44 a	12.0 bc
Pima S-5	23.5 ab	3.67 a	1.14 e	12.0 bc
P-51	22.8 cd	3.48 cd	1.28 bc	11.2 e
P-58	21.7 f	3.40 d	1.30 bc	12.9 a

Table 133. Pima test: Yield, boll, fiber and yarn tenacity data for Safford, Ariz. (Curtis farm)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-59	1387 a	3.55	42.4	10.8	200
P-34	1309 ab	3.32	42.2	11.6	200
P-57	1306 ab	3.09	39.9	9.7	188
P-45	1270 b	3.13	39.8	10.0	215
P-51	1253 bc	3.40	39.0	11.2	203
P-61	1233 bc	3.53	40.8	10.3	196
E-15	1233 bc	3.38	40.9	10.0	204
P-52	1233 bc	3.33	39.7	10.2	204
P-60	1232 bc	3.45	39.9	10.8	202
P-53	1205 bc	3.18	39.4	11.6	216
P-58	1154 c	3.10	37.5	10.8	202
Pima S-5	1052 d	3.74	40.8	11.2	192

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-59	1.40	0.72	282	7.2	4.30
P-34	1.33	.71	276	7.0	4.50
P-57	1.38	.70	284	7.0	4.25
P-45	1.41	.73	296	7.1	4.45
P-51	1.39	.70	280	7.4	4.60
P-61	1.40	.70	274	6.9	4.15
E-15	1.33	.68	266	6.9	4.05
P-52	1.38	.70	291	6.4	4.45
P-60	1.35	.69	290	6.8	4.35
P-53	1.40	.76	306	6.9	4.05
P-58	1.42	.72	285	6.2	3.95
Pima S-5	1.39	.72	255	8.0	4.00

Table 134. Pima test: High-Volume Instrument, Colorimeter, and seed data for Safford, Ariz. (Curtis farm)

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-59	1.33	86.5	36.5	69.5	10.4
P-34	1.42	83.0	35.0	60.7	11.9
P-57	1.18	84.0	42.0	72.2	9.7
P-45	1.28	83.5	40.0	64.5	10.6
P-51	1.46	84.0	38.5	65.8	11.5
P-61	1.45	85.0	36.5	66.0	11.6
E-15	1.41	86.0	33.5	64.5	11.3
P-52	1.40	85.5	34.5	65.0	11.5
P-60	1.46	85.5	38.5	64.7	11.3
P-53	1.42	84.0	34.5	67.5	11.3
P-58	1.30	83.5	37.0	66.0	11.0
Pima S-5	1.46	85.5	32.0	66.2	11.4

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
P-59	23.4	3.26	1.26	12.0
P-34	23.6	3.35	1.34	13.0
P-57	22.2	3.08	1.42	12.0
P-45	23.4	3.17	1.62	12.0
P-51	23.9	3.32	1.50	12.0
P-61	24.8	3.27	1.29	13.0
E-15	24.4	3.20	1.52	13.0
P-52	23.6	3.06	1.64	13.0
P-60	24.3	3.34	1.16	12.5
P-53	24.0	3.40	1.58	12.0
P-58	23.9	3.20	1.46	13.0
Pima S-5	24.6	3.33	1.28	13.0

Table 135. Pima test: Yield, boll, fiber and yarn tenacity data for Phoenix, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-53	1340 a	2.74	36.8	11.5	207
P-34	1295 ab	2.77	38.7	11.9	210
E-15	1216 bc	2.99	37.0	11.3	202
Pima S-5	1199 bc	3.25	38.2	11.3	197
P-59	1198 bc	2.99	38.9	11.4	206
P-61	1187 bc	3.05	36.8	11.6	200
P-60	1172 c	3.13	36.6	11.6	210
P-45	1139 cd	2.66	35.6	10.7	214
P-52	1043 d	2.70	36.0	11.1	211
P-58	919 e	2.69	33.7	12.0	200
P-51	908 e	2.92	35.8	11.9	206
P-57	905 e	2.57	34.1	11.2	205

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-53	1.36	0.73	322	6.2	4.20
P-34	1.38	.70	320	6.6	4.70
E-15	1.40	.73	280	6.8	4.45
Pima S-5	1.34	.72	296	6.5	4.50
P-59	1.40	.73	270	6.4	4.85
P-61	1.43	.74	293	6.6	4.35
P-60	1.39	.72	312	6.4	4.80
P-45	1.40	.74	327	6.6	4.75
P-52	1.41	.74	333	6.1	4.65
P-58	1.38	.70	298	6.0	4.20
P-51	1.35	.74	290	6.6	4.75
P-57	1.36	.73	299	6.4	4.45

Table 136. Pima test: High-Volume Instrument, Colorimeter, and seed data for Phoenix, Ariz.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-53	1.40	86.0	34.5	64.5	11.1
P-34	1.41	86.5	40.0	66.5	11.9
E-15	1.44	84.5	36.5	65.0	10.5
Pima S-5	1.44	87.0	35.0	70.2	11.3
P-59	1.38	86.5	33.5	72.2	10.0
P-61	1.42	85.0	39.5	62.5	9.4
P-60	1.30	85.5	43.0	69.8	10.9
P-45	1.42	84.5	40.5	66.0	11.0
P-52	1.26	85.5	37.5	62.2	9.7
P-58	1.48	82.5	42.0	68.0	10.5
P-51	1.37	85.5	39.5	62.5	11.3
P-57	1.38	86.0	40.0	74.5	8.8

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
P-53	21.1	3.56	1.13	11.5
P-34	23.0	3.53	1.04	13.0
E-15	23.7	3.60	1.22	12.0
Pima S-5	23.0	3.46	.95	12.0
P-59	21.0	3.60	1.00	11.5
P-61	22.4	3.74	1.02	12.0
P-60	22.4	3.63	.90	12.0
P-45	22.6	3.52	1.10	12.0
P-52	21.4	3.40	1.22	12.0
P-58	21.0	3.42	1.02	12.5
P-51	21.4	3.60	.94	11.5
P-57	19.8	3.52	1.14	11.0

Table 137. Pima test: Yield, boll, fiber and yarn tenacity data for Wenden, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-59	1329 a	3.88	40.8	12.9	200
P-53	1289 a	3.38	38.3	13.0	212
E-15	1255 a	3.83	38.9	12.6	201
P-61	1254 a	3.89	39.0	12.6	194
P-45	1213 a	3.24	38.2	11.7	212
P-57	1206 a	3.21	37.9	11.6	203
P-34	1182 ab	3.64	40.9	13.1	200
P-60	1156 abc	3.95	39.5	12.9	210
P-51	1028 bcd	3.47	38.1	12.6	206
P-52	1024 bcd	3.42	38.5	12.1	209
Pima S-5	1001 cd	3.76	39.7	12.6	192
P-58	964 d	3.30	37.4	12.6	200

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-59	1.40	0.70	292	7.3	4.85
P-53	1.40	.74	287	7.2	4.05
E-15	1.37	.69	278	7.0	4.10
P-61	1.42	.70	282	7.0	4.40
P-45	1.41	.72	294	7.4	4.65
P-57	1.39	.72	286	7.0	4.25
P-34	1.37	.74	298	7.4	4.65
P-60	1.38	.71	297	7.2	4.70
P-51	1.38	.72	292	7.6	4.55
P-52	1.46	.81	308	6.4	4.25
Pima S-5	1.40	.72	300	7.4	4.30
P-58	1.45	.73	295	6.7	4.25

Table 138. Pima test: High-Volume Instrument, Colorimeter, and seed data for Wenden, Ariz.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-59	1.06	85.0	34.5	59.2	9.1
P-53	1.46	88.0	35.0	63.0	11.5
E-15	1.36	84.5	35.5	57.0	10.0
P-61	1.40	83.5	39.0	60.8	9.4
P-45	1.34	87.0	37.5	64.2	10.0
P-57	1.49	86.5	38.5	68.2	8.9
P-34	1.40	85.5	36.5	58.5	11.3
P-60	1.48	85.5	37.5	65.2	11.1
P-51	1.43	88.0	36.5	65.2	10.8
P-52	1.38	86.5	42.5	67.8	11.0
Pima S-5	1.37	86.5	32.5	67.2	11.0
P-58	1.13	83.0	36.5	66.0	11.5

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
P-59	22.1	3.80	1.34	12.0
P-53	22.2	3.75	1.42	12.0
E-15	23.1	3.90	1.50	12.0
P-61	23.2	3.77	1.38	12.5
P-45	22.4	3.58	1.36	12.0
P-57	20.4	3.56	1.36	11.5
P-34	22.5	3.78	1.22	13.0
P-60	22.6	3.90	1.10	12.0
P-51	22.7	3.50	1.36	11.0
P-52	22.6	3.64	1.52	12.0
Pima S-5	23.2	3.88	1.20	12.0
P-58	22.0	3.58	1.38	13.0

Table 139. Pima test: Yield, boll, fiber and yarn tenacity data for Safford, Ariz. (Layton farm)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	1296 a	3.69	42.5	12.5	198
P-61	1235 ab	3.60	40.5	11.7	196
P-45	1235 ab	3.33	39.7	11.0	203
E-15	1226 ab	3.46	40.7	11.2	198
P-59	1207 b	3.91	42.5	11.6	203
P-53	1126 c	3.29	39.2	12.2	212
P-57	1117 c	2.98	39.9	10.5	195
P-52	1087 c	3.34	39.5	11.0	206
Pima S-5	1083 c	3.74	41.5	11.6	196
P-60	1063 c	3.71	39.9	11.5	214
P-51	1055 cd	3.61	39.6	11.2	208
P-58	991 d	3.29	38.1	12.0	204

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-34	1.34	0.74	291	7.0	4.60
P-61	1.38	.70	280	7.2	4.55
P-45	1.40	.74	296	7.5	4.55
E-15	1.37	.68	273	6.7	4.25
P-59	1.42	.76	278	7.6	4.95
P-53	1.40	.76	287	7.6	4.00
P-57	1.37	.74	282	6.9	4.65
P-52	1.39	.74	293	7.0	5.05
Pima S-5	1.39	.74	286	7.1	4.25
P-60	1.37	.72	278	7.1	4.45
P-51	1.40	.74	284	7.8	4.55
P-58	1.46	.74	278	6.5	4.30

Table 140. Pima test: High-Volume Instrument, Colorimeter, and seed data for Safford, Ariz. (Layton farm)

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-34	1.35	87.5	41.5	64.0	11.4
P-61	1.46	85.0	40.0	62.8	11.2
P-45	1.32	86.5	41.5	66.2	11.1
E-15	1.30	84.0	41.5	66.8	11.2
P-59	1.36	84.5	38.5	70.0	10.2
P-53	1.44	89.0	36.0	65.0	11.2
P-57	1.31	85.5	37.5	69.2	9.6
P-52	1.30	88.0	44.0	61.2	10.9
Pima S-5	1.46	87.0	33.5	65.5	11.0
P-60	1.40	86.5	41.0	66.8	10.5
P-51	1.34	87.0	40.5	66.2	11.1
P-58	1.48	84.0	36.5	67.2	11.1

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
P-34	24.5	3.06	1.25	13.0
P-61	25.6	3.00	1.34	13.0
P-45	24.6	2.98	1.42	12.0
E-15	25.2	3.06	1.45	13.0
P-59	23.2	3.10	1.45	12.0
P-53	23.8	3.11	1.56	12.0
P-57	22.6	2.88	1.44	12.0
P-52	25.0	2.80	1.83	12.0
Pima S-5	25.0	3.06	1.22	13.0
P-60	25.1	3.10	1.34	12.5
P-51	24.4	2.97	1.59	12.0
P-58	24.4	3.02	1.49	13.0

Table 141. Pima test: Yield, boll, fiber and yarn tenacity data for Marana, Ariz. (Clark farm)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-59	1212 a	3.96	40.1	12.9	208
P-34	1081 b	3.59	39.5	13.0	208
P-53	1031 bc	3.42	37.3	12.8	216
P-45	1009 bc	3.29	37.6	12.7	210
P-60	989 bc	3.91	37.7	11.2	210
P-61	945 bcd	4.04	37.4	12.7	200
P-51	937 bcd	3.46	37.5	12.4	216
E-15	927 cde	3.93	37.3	12.5	210
P-52	900 cde	3.51	38.8	11.4	210
Pima S-5	883 cde	4.02	37.7	13.1	192
P-57	808 de	3.43	37.1	11.9	202
P-58	794 e	3.25	36.6	12.0	206

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-59	1.44	0.80	288	7.4	4.75
P-34	1.40	.75	285	7.1	4.75
P-53	1.44	.78	280	6.8	4.25
P-45	1.44	.74	299	6.7	4.80
P-60	1.44	.77	301	6.8	4.85
P-61	1.44	.74	270	7.2	4.65
P-51	1.44	.74	298	7.0	5.10
E-15	1.40	.72	280	7.4	4.05
P-52	1.44	.74	286	6.2	4.95
Pima S-5	1.41	.72	283	7.4	4.40
P-57	1.42	.72	292	6.6	4.45
P-58	1.48	.74	294	6.4	4.25

Table 142. Pima test: High-Volume Instrument, Colorimeter, and seed data for Marana, Ariz. (Clark farm)

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-59	1.40	90.5	37.0	69.0	10.8
P-34	1.46	89.5	39.0	64.8	12.1
P-53	1.38	84.5	30.5	59.8	10.7
P-45	1.38	85.5	41.0	67.5	10.8
P-60	1.20	85.0	42.0	66.2	10.9
P-61	1.43	87.5	35.0	64.2	11.6
P-51	1.27	84.5	33.0	63.8	11.2
E-15	1.27	84.0	37.0	66.5	11.1
P-52	1.22	86.5	35.0	62.5	11.2
Pima S-5	1.37	86.0	29.5	61.5	11.2
P-57	1.30	89.5	32.0	71.0	9.0
P-58	1.41	84.5	35.5	65.8	11.7

	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
P-59	23.1	3.48	1.28	12.0
P-34	24.0	3.40	1.18	13.0
P-53	23.2	3.59	1.49	12.0
P-45	23.6	3.37	1.35	11.5
P-60	23.6	3.52	1.17	12.0
P-61	23.5	3.62	1.43	12.5
P-51	23.9	3.36	1.25	11.5
E-15	24.0	3.71	1.46	12.0
P-52	23.5	3.26	1.47	12.0
Pima S-5	24.6	3.62	1.26	12.0
P-57	21.2	3.58	1.23	12.0
P-58	23.0	3.24	1.40	13.0

Table 143. Pima test: Yield, boll, fiber and yarn tenacity data for Salome, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-57	1206 a	3.04	37.6	11.0	194
P-59	1201 a	3.71	40.3	12.1	199
E-15	1197 a	3.39	38.7	11.5	199
P-53	1138 ab	3.11	37.7	12.1	214
P-45	1130 ab	3.01	38.5	11.1	207
P-61	1120 ab	3.61	38.2	11.8	194
P-34	1115 ab	3.12	40.6	12.4	206
P-60	1077 b	3.62	39.0	11.8	206
P-52	959 c	3.14	39.3	11.1	202
Pima S-5	872 cd	3.47	39.5	11.6	194
P-51	838 d	3.13	37.9	11.4	198
P-58	706 e	2.65	37.3	11.1	193

	Digital Fibrograph		Stelometer		Micronaire reading
	2.5% S.L. (inches)	50% S.L. (inches)	T_1 (mN/tex)	E_1 (percent)	
P-57	1.43	0.75	282	7.6	4.30
P-59	1.39	.76	276	7.4	4.55
E-15	1.36	.66	260	6.8	4.20
P-53	1.39	.70	303	7.2	4.15
P-45	1.42	.72	296	7.0	4.65
P-61	1.40	.70	270	7.6	4.40
P-34	1.38	.70	274	7.2	4.30
P-60	1.41	.72	280	7.6	4.50
P-52	1.44	.73	292	6.6	4.30
Pima S-5	1.36	.69	268	7.4	4.20
P-51	1.38	.69	285	7.0	4.35
P-58	1.42	.70	276	6.4	4.05

Table 144. Pima test: High-Volume Instrument, Colorimeter, and seed data for Salome, Ariz.

Variety	High-Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R_d	Hunter's *b* value
P-57	1.37	84.5	35.5	73.0	9.3
P-59	1.33	83.5	33.5	69.2	10.2
E-15	1.25	84.5	31.0	69.0	10.7
P-53	1.42	87.5	37.5	66.8	10.5
P-45	1.10	85.5	40.0	67.2	10.6
P-61	1.22	82.5	38.5	58.8	8.2
P-34	1.61	84.5	33.5	64.5	11.8
P-60	1.37	86.0	35.5	71.8	10.7
P-52	1.38	84.5	36.5	66.5	10.7
Pima S-5	1.38	82.0	31.0	67.8	11.0
P-51	1.40	85.0	40.0	62.8	11.4
P-58	1.17	81.5	34.0	67.5	10.9

Variety	Seed data			
	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Seed grade
P-57	21.2	3.36	1.42	12.0
P-59	21.5	3.62	1.42	12.0
E-15	23.8	3.66	1.34	12.0
P-53	22.6	3.66	1.44	12.0
P-45	23.0	3.39	1.42	12.0
P-61	22.8	3.58	1.36	12.0
P-34	22.8	3.60	1.22	13.0
P-60	23.0	3.70	1.24	12.0
P-52	22.7	3.24	1.57	12.0
Pima S-5	23.0	3.70	1.16	12.0
P-51	23.0	3.44	1.55	11.0
P-58	20.9	3.38	1.38	13.0

Table 145.--Combed-yarn Test: Phoenix, Ariz.

Test	Variety			
	Pima S-5	P-34	P-45	P-51
Classer's designation:				
Grade	9	7	10	10
Staple: 32's inch	46	48	46	48
Yarn tenacity, cN/tex:				
11.8-tex, combed	157	164	167	164
7.4-tex, combed	131	139	142	142
Yarn appearance index	115	110	115	115
Yarn imperfections:				
11.8-tex, combed	48	52	72	70
7.4-tex, combed	104	114	86	104
Waste, percent:				
Picker and card	11.8	13.7	15.3	16.5
Comber	15.1	15.4	16.9	14.5
	P-52	P-53	P-57	P-58
Classer's designation:				
Grade	10	10	10	10
Staple: 32's inch	46	46	46	48
Yarn tenacity, cN/tex:				
11.8-tex, combed	164	174	164	164
7.4-tex, combed	139	146	135	139
Yarn appearance index	115	105	105	100
Yarn imperfections:				
11.8-tex, combed	116	106	74	90
7.4-tex, combed	208	146	120	120
Waste, percent:				
Picker and card	16.0	14.4	22.7	15.0
Comber	14.9	15.6	17.4	17.4
	P-59	P-60	P-61	E-15
Classer's designation:				
Grade	10	9	9	9
Staple: 32's inch	46	48	46	46
Yarn tenacity, cN/tex:				
11.8-tex, combed	157	167	162	164
7.4-tex, combed	131	139	135	142
Yarn appearance index	115	120	105	95
Yarn imperfections:				
11.8-tex, combed	40	60	140	78
7.4-tex, combed	72	150	246	190
Waste, percent:				
Picker and card	12.2	13.2	14.3	13.7
Comber	13.1	14.5	16.2	18.3

Table 146.--Combed-yarn Test: Safford, Ariz.

Test	Variety			
	Pima S-5	P-34	P-45	P-51
Classer's designation:				
Grade	5	5	4	5
Staple: 32's inch	46	46	46	46
Yarn tenacity, cN/tex:				
11.8-tex, combed	157	162	174	172
7.4-tex, combed	135	139	150	146
Yarn appearance index	110	125	115	115
Yarn imperfections:				
11.8-tex, combed	40	16	32	42
7.4-tex, combed	156	54	120	74
Waste, percent:				
Picker and card	10.4	10.1	12.8	14.6
Comber	13.9	13.3	13.3	14.4
	P-52	P-53	P-57	P-58
Classer's designation:				
Grade	5	4	8	5
Staple: 32's inch	46	46	46	46
Yarn tenacity, cN/tex:				
11.8-tex, combed	167	186	160	176
7.4-tex, combed	146	158	135	150
Yarn appearance index	115	110	115	95
Yarn imperfections:				
11.8-tex, combed	80	28	24	88
7.4-tex, combed	150	96	56	240
Waste, percent:				
Picker and card	12.8	10.5	19.4	13.1
Comber	16.2	13.7	14.9	13.7
	P-59	P-60	P-61	E-15
Classer's designation:				
Grade	5	4	4	5
Staple: 32's inch	46	46	46	46
Yarn tenacity, cN/tex:				
11.8-tex, combed	160	172	167	169
7.4-tex, combed	135	142	139	142
Yarn appearance index	115	120	115	115
Yarn imperfections:				
11.8-tex, combed	30	14	74	40
7.4-tex, combed	120	88	190	80
Waste, percent:				
Picker and card	10.2	10.7	10.7	10.5
Comber	14.0	14.2	14.7	14.8

ACKNOWLEDGMENTS

The success of the National Cotton Variety Testing Program results from the interest and diligence of many workers who conducted the tests, processed the fiber samples, tabulated the information, and analyzed the data. The following were primarily responsible for furnishing field data and providing samples:

Alabama--W. C. Johnson.
Arizona--C. V. Feaster, W. D. Fisher, F. Carasso, L. L. Patterson
Arkansas--C. W. Smith
California--D. M. Bassett.
Georgia--S. H. Baker, J. B. Weaver, Jr.
Louisiana--D. J. Bouquet, W. D. Caldwell, B. B. Holoubek, D. M. Walker
Mississippi--R. R. Bridge, W. R. Meredith, Jr.
Missouri--W. P. Sappenfield.
New Mexico--C. E. Barnes, N. R. Malm.
North Carolina--J. A. Lee.
Oklahoma--J. Avis, L. M. Verhalen.
South Carolina--T. W. Culp, J. B. Pitner.
Texas--L. E. Clark, R. A. Creelman, J. R. Gannaway, G. A. Niles, L. Reyes, N. F. Vestal.
Tennessee--P. E. Hoskinson.

The interest and cooperation of the commerical cottonseed firms of the United States are acknowledged. For the most part, seed for the regional varieties were contributed by commercial firms. Seed of varieties used as national standards were supplied by the following organizations: Acala SJ-5--California Planting Cotton Seed Distributors, Bakersfield, Calif.; Lockett 77--Pioneer Hi-Bred International, Inc., Vernon, Tex.; McNair 235--Northrup King Co., Leland, Miss.; and Stoneville 213--Stoneville Pedigreed Seed Co., Stoneville, Miss.

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